

Feedback



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A note from the MD...



This year is off to an encouraging start with the Eastern Young Cattle Indicator (EYCI) rising by more than 60¢/kg cwt during the second week of markets. Assisting prices has been some well overdue rainfall, sparking much needed confidence for restockers, while at the same time limiting prime livestock supplies.

However, the reality for many producers is that unfavourable seasonal conditions continue to ensure ongoing volatility and uncertainty in the marketplace.

MLA's market information team has been analysing how this - and other supply and demand trends - may play out over the coming years. The results of their analysis are presented in MLA's *Australian cattle industry projections 2015*. MLA's Market Information Manager Ben Thomas shares the key findings on pages 36-37.

As well as rain and increased cattle prices, last month saw another positive development with the Japan-Australia Economic Partnership Agreement coming into force. This Agreement is expected to see sales of Australian beef to Japan rise by around \$5.5 billion over the next 18 years. Congratulations to everyone involved in ensuring this hugely successful outcome.

MLA is aware of the frustrations of producers when ordering NVDs. Find some frequently asked questions and answers on the new NVD and tips for avoiding lengthy delays on page four. I've received very positive feedback on

this year's Australia Day campaign, fronted by cricketing legend Richie Benaud (for more, see page three). Australian lamb has well and truly staked a claim on this national day with an average 34% increase in lamb sales leading up to Australia Day in the last three years. MLA's marketing team has worked incredibly hard on delivering this campaign and I am grateful for their efforts. To find out about the development of the new beef campaign, turn to page seven.

MLA is a producer owned company with a skills based Board who are principally levy payers. The Board has made it clear that MLA needs to deliver more transparency on how the levy is used and communicate the benefits to levy payers. The MLA management team is committed to consulting and communicating even more in 2015 and I encourage feedback on MLA by email, a call or face-to-face when the opportunity arises.

Happy New Year,

Richard Norton
MLA Managing Director

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Australia Day campaign

A legendary lamb campaign

An Australian icon was called in to help out an iconic marketing campaign - eating lamb on Australia Day.

67%

of Australians claim lamb as the most patriotic meat

34%

average increase in lamb sales during the Australia Day period in last three years

Cricket commentator **Richie Benaud** was revealed as the new lamb campaigner in a television commercial launched on Channel 9's *The Today Show* on 9 January.

Richie called on the original Lambassador Sam Kekovich, as well as a host of other national icons, to join his mission to bring Australians together to share lamb on Australia's national day.

"Just like cricket, the annual lamb campaign is synonymous with Australia Day and I'm thrilled to be part of it in 2015. To me, Australia Day is the perfect excuse to get together with friends and family over a

barbecue and enjoy some delicious lamb chops," Richie said.

MLA Central Marketing & Industry Insights General Manager Michael Edmonds said a well-loved Australian, such as Richie, captured the spirit of Australia's national day by doing what Australians love to do; organising a lamb barbecue and a game of backyard cricket.

"Having Richie on board allowed us to really encapsulate and celebrate the spirit of Australia Day. He is as iconic to Australians as lamb itself, so we couldn't think of anyone more fitting to join our Lambassador Sam Kekovich in this next

chapter of the Australia Day lamb campaign," he said.

"We are proud that Richie was an integral part of the 2015 campaign - he is enthusiastic and passionate about Aussie lamb and we are delighted that he has agreed to get behind our cause to sell more lamb this Australia Day."

The campaign was supported by a network partnership with Channel 9, television billboards, point-of-sale materials in retailers, targeted digital promotion on ninemsn.com and a suite of delicious and economical lamb meals on MLA's consumer-focused website weloveourlamb.com.au.

Consumers could also interact with the campaign through social media promotion across MLA's consumer focused 'We Love our Lamb' Facebook page.

Benaud was so passionate about getting the nation eating lamb on Australia Day that he extended an invitation to 10 lucky Aussies to join him for the ultimate Australia Day experience: a lamb barbecue, a game of backyard cricket, beer and banter.

The competition asked lamb lovers to upload their best impersonation of Richie's legendary voice in his lamb barbecue call; "Top Lamb Chop That!" to the Facebook page.

Richie calls on Sam Kekovich, as well as a host of other national icons, to join him in eating lamb.



Watch the advertisement on YouTube at: www.youtube.com and search for 'We love our lamb'.

→ **Fire up the barbie with our recipes on pages 32-33.**

LIVESTOCK PRODUCTION ASSURANCE
STAND BY WHAT YOU SELL



NVD ordering update

The demand for new versions of the Livestock Production Assurance (LPA) National Vendor Declaration (NVD) has resulted in a record number of calls from producers looking to order new NVD books. Further funding has been allocated to this service and operating line capacity tripled, however the unprecedented volume of calls (up to 3,000 per day) has resulted in frustrating delays for producers.

Here is some advice to avoid lengthy delays when ordering an LPA NVD book:

Do I already have the latest version?

The latest version has 'Edition: April 2013' printed on the cover and the number 0413 printed alongside the NVD type in the top left corner (C0413 for cattle and S0413 for sheep). The latest NVD for bobby calves is BCO412. If you have this version on hand already, you don't need to buy another book.

Do I need the latest version? Producers should check with their livestock buyer which version of the NVD is required before consigning livestock.

Having the latest version maximises the number of potential buyers of your stock but all versions are still current under LPA rules. If the buyer is not asking for the latest version, then you may be able to use an older version of the NVD.

If buyers demand the latest version, emergency NVDs are available for use once a new book has been purchased to cover the period producers are waiting for delivery.

Goat industry

Knowledge bank

Australia's goat industry has been on an upward trajectory since the turn of the century and with 2014 breaking another record for production levels, it doesn't appear to be slowing.

Four new webinars can be viewed on the MLA website to bring producers up to speed on the latest developments in the goat industry.

Webinar 1: Goatmeat market requirements, prices and trends

Blair Brice, Business Development Manager of Wellard Meat Trading in Western Australia, Campbell McPhee, owner of Western Meat Exporters in Queensland and Ben Thomas, Senior Market Analyst with MLA, speak about:

- Specifications and issues for producers when sending goats to processing.
- Insights into the drivers of the market.
- The market outlook and what this means for Australian producers.

Webinar 2: Goatmeat markets - opportunities, development and promotion

Morgan Gronold, Senior Trade and Investment Officer of Trade and Investment

Queensland presents findings from 2014 market research on the opportunities, risks and areas of volatility and stability within current and emerging international markets.

Stephen Edwards, MLA's Business Manager Global Marketing provides an update on the MLA marketing and promotion program for goatmeat, both internationally and domestically.

Webinar 3: Genetic improvement and parasite management - what you need to know

This webinar covers developments and opportunities for genetic improvement and ways of managing internal parasite burdens.

Ben Swain of BCS Agribusiness explains how, based on findings from an ongoing Boer Select buck evaluation trial, producers can turn off more kilograms by using modern genetics bred for Australian conditions.

\$160.8

million worth of goatmeat exported from Australia in 2013

15,500

tonnes exported to the USA in 2013, our largest customer

An overview on parasite management is given by Dr Johann Schröder, MLA's Program Manager Health and Biosecurity, who also speaks on new research investments and resources in this area.

Webinar 4: Grazing pressure and dog control case study

A group of producers near Morven, Queensland, banded together on a cluster fencing project encompassing 445,000ha, 40 landholders and three national parks. Amy Gunn of Western Local Land Services NSW provides an overview of the system in this webinar.

The fencing enabled control of grazing pressure and additional control of wild dogs in conjunction with other control methods. Viewers are given the opportunity to learn more about how this program was set up, ongoing maintenance and the flow-on benefits to land values, productivity and diversification.



Julie Petty, MLA, Goat Industry Development Manager
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Watch the webinars at:
www.mla.com.au/Research-and-development/Extension-and-training/Going-into-goats/Goatmeat-Webinar

Do I need to order over the phone? If you have internet access, order your book online using your LPA number to login at <http://lpa.ausmeat.com.au> Electronic NVDs are available to download and can be purchased online with a 48% discount.

If you are not consigning stock in the next month or so, delay your purchase. The current call volumes are expected to decrease.

If you must order by phone, the quietest times are a Thursday and Friday afternoon (AEDT). Monday's and Tuesday's have been the busiest days so avoid calling on these days if you can.



Producers can call 1800 683 111 to purchase hardcopy LPA NVDs. Producers who have further concerns are advised to contact their peak industry council. Producers who have concerns with their commercial requirements for the 0413 NVD version should raise these with their agent or livestock buyer.



Visit <http://lpa.ausmeat.com.au> to order a new hardcopy LPA NVD booklet or purchase electronic LPA NVDs.

For information about the LPA NVD and version requirements www.mla.com.au/lpa

Farm300 on film

With just four months of the two year Farm300 program to go, 23 coaches and more than 300 producers have been working together across the country to increase the profitability of livestock enterprises while reducing greenhouse gas emissions.

The progress of six Farm300 producers is being filmed in a series of short videos. Each producer has been filmed near the start of

their Farm300 journey and will be filmed again at the conclusion of the program in coming months.



Watch the first videos of all six producers: www.mla.com.au/farm300

Farm300 is supported by funding from the Australian Government and is delivered by MLA in partnership with Dairy Australia, Australian Wool Innovation and the Australian Farm Institute.

Sandy Nott South Australia	Nick Gay NSW	Janet Furler South Australia
		
Investigating using grapemarc as a supplementary feed source which increases kg/head and reduces emissions.	Focusing on increasing stocking rate and matching to carrying capacity.	Looking at alternative pasture species and feed to fill feed gaps, increase efficiencies and reduce methane emissions.
Simon Ross Victoria	Tom McGuiness NSW	Glen White Victoria
		
Measuring the efficiency, emissions and profitability of the family's feedlot.	Focusing on matching stocking rate with feed availability and the changing climate.	Exploring increased stocking rates, profitability and land conservation.

Global outlook



How can the sheepmeat industry create value in changing environmental, economic and social times? This is the question that will be investigated by the 2015 MLA-sponsored Nuffield scholar Michael Craig from Harrow, Victoria.

Michael is General Manager of Tuloona Pastoral, a mixed enterprise with 18,000 sheep, 500 cows and a 1,400ha cropping program.

"If the forecasts around climate change and global development trends are right, then Australian sheepmeat products will increasingly become a semi-luxury protein source, requiring new ways of thinking about our supply chains," he said.

"I'll be looking at whether additional value creation can be distributed equitably through the supply chain to improve returns and vertical linkages, particularly in the context of Australia's climate variability, production scale and ability to adapt."

The scholarship comprises of organised and individual study components.

Michael plans to inspect supply chain models in the US, New Zealand, Europe and the UK.



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www.nuffield.com.au

Growing demand

Sending the right message



\$17m

spent on beef every day by Australian consumers.

More than 30%

of consumers would cook beef more often if they had greater confidence to buy and cook the right cut

A television commercial runs for 60 or 30 seconds. A YouTube clip for a couple of minutes. An advertisement on the side of a city bus can flash past in an instant. And yet, they are the product of months, sometimes even years, of hard work.

The messages, images and design are carefully crafted out of extensive research. They form the 'public face' of MLA's investment in driving demand for red meat.

If anyone has an insight into just how much work goes on behind the scenes it's MLA's Marketing Manager for Consumer Programs, Andrew Howie.

He explained developing a successful campaign is a multi-step process.

"Each year we conduct a number of studies to understand what drives consumers' decision making process, both pre-store and in-store," Andrew said.

"Our research aims to understand attitudes towards beef and lamb, ranking these against a number of key pillars, and how these have evolved over time.

"We track sales' data to understand which consumer groups have the most growth potential (families, retirees etc), and we seek to better understand what drives purchase.

"We then take those learnings and apply them as the basis for the work that you see. Our campaigns set out to give consumers an incentive to eat more beef (for example). We do that by reminding consumers what they love about beef, inspiring them to buy more.

"This is done through reinforcing positive product associations while countering the negatives."

Andrew said that trends, such as price competition from other proteins and the Asian influence on our cuisine, which typically features a higher proportion of other meats, had created new challenges for beef sales.

"With meat prices predicted to rise in the next five years it is essential we do the groundwork to increase perceived value of our product, which not only relates to price but product attributes such as the health and taste credentials," he said.

Promotion pays

The MLA marketing team works hard to provide benefits back to producers including:

- Keeping beef top of mind for consumers, particularly during higher consumption periods such as winter for slow cook cuts and summer for barbecue cuts.
- Working closely with major retailers, wholesalers and foodservice accounts to run and extend promotions

"Producer levies fund a wide range of MLA marketing programs around the globe, and have been critical in building and maintaining demand, expanding product usage, increasing market access and developing a positive image for Australian beef and lamb," Andrew said.

Boosting beef's broad appeal

As you read this, Andrew Howie and the beef marketing team - including Senior Brand Manager Natalie Johnson and Assistant Brand Manager Anna Swan - are putting the finishing touches on MLA's beef brand relaunch.

It will see the brand move on from the 'Nothing beats beef' campaign of 2010-14, to resonate with a more targeted family audience.

The new campaign aims to promote that beef is healthy, affordable and easy to cook.

"More than 30% of consumers consider themselves low-confidence* cooks. They have told us they would cook beef more often if they had greater confidence in buying the right cut and knew how to cook it," Andrew said.

"While our previous beef campaign focused on superiority and taste, the new-look campaign pushes the health and nutrition aspects of beef - important messages to families. Yet the message is broad enough to appeal to many people, promoting a healthy attitude towards life alongside the product attributes of beef."

**Source: 2014 Digital Edge/BMF survey*



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From pitch to platform - how a campaign is created

Creating a marketing campaign is an involved process. Here is a peek behind the scenes of the development of MLA's new beef campaign.



Briefing:

- **The pitch:** MLA's beef branding team invite three public relations agencies and three advertising agencies to pitch campaign ideas. The stand-out pitch is from BMF (www.bmf.com.au).
- **Research:** MLA reviews consumer research to identify the market segment to target and what influences their shopping and eating habits. This information will be used to develop the look and feel of the campaign, to make sure it hits its mark.
- **Briefing:** Based on research insights the campaign's key messages are developed and the advertising agency is briefed.
- **Media buy:** MLA works with its media buying agency to develop a schedule. The target audience influences the TV channels the campaign will appear on and what other forums (eg billboards and online advertising) are used.

Concept development:

- **Creative:** The agency crafts the campaign insight and idea, drafts the TV ad script and suggests potential outdoor, point of sale and online ads. The creative team, including graphic designers, photographers and producers, design point of sale material such as posters and recipe pads and develop print advertisements and online advertising. BMF pitches the brief to production houses, who provide a 'director's treatment' of the script. The successful production house handles locations, casting and talent - with MLA direction along the way.
- **Logistics:** 'Campaign assets', such as point of sale material, are printed and delivered to butchers and grocery stores via a distribution centre. MLA liaises with these outlets so they are aware of the campaign and can respond to customer queries, such as how to prepare the cuts of beef featured in the campaign.

Execution:

- **In-market:** The campaign is ready to 'go live'. MLA alerts trade and consumer media to the campaign. TV ads start airing, billboard and bus shelter advertisements are unveiled and the campaign is promoted online and through social media.
- **Publication partnerships:** MLA works with magazines, newspapers and bloggers to promote beef recipes, cuts and cooking tips which complement the campaign. Publication partners include Bauer, Pacific Magazines, News Corp and Fairfax Media.

Evaluation:

- **Measurement:** MLA starts measuring the impact of the campaign from one week before launch. Evaluation includes beef sales, advertising investment as a share of the food sector spend, changes in consumer attitudes and articles published.

Look out for the new beef campaign in March.

Labour efficiency

Speeding up the process

An x-ray machine which differentiates fat and muscle sounds like a fitness industry breakthrough, but the real benefit may be to Australia's beef and lamb processors. It is just one of the R&D outcomes delivering gains to the supply chain and includes potential benefits to producers through improved feedback on objective carcase measurements.

MLA invests producer levies in marketing, research and development programs. MLA is also able to co-invest with value chain partners in programs through the MLA Donor Company (MDC). No producer levies are used in this program.

The MDC has partnered with red meat processors and technology providers since 2002 to develop automation equipment. The current annual investment averages \$10 million. MLA invests producer levies in marketing, research and development programs. MLA is also able to co-invest with value chain partners in programs through MDC. No producer levies are invested in these programs.

MLA's R&D Program Manager for Supply Chain Technology, Christian Ruberg, said an efficient and competitive supply chain was at the heart of this research.

"The Australian beef and lamb industry has the greatest need for automation technology because of labour shortages in the processing sector and different cost pressures compared to countries such as Brazil and the US," Christian said.

"As a result, Australia is leading the world in automation for beef and lamb processing."

Automation R&D focuses on four main areas: lamb slaughter and dressing, lamb boning, beef slaughter and dressing and beef boning. Technologies that are being developed - or are already commercially available - include fully automated and semi-automated machines for different stages of processing, plus operator safety equipment. They take the place of highly repetitive, physically arduous or dangerous jobs such as skinning carcasses, boning and operating band saws.

"This frees up staff to do the higher-value activities which require human judgement and skills," Christian said.

Producer benefit

While the benefits to processors are clear with more sustainable labour requirements, safer operating environments, less wastage and greater consistency, the value may also flow back to producers.

Automated systems rely on technologies such as x-ray and precision cutting to give processors the ability to increase product value and improve yield - productivity gains which enable abattoirs to purchase and process more stock.

Another benefit for producers is on the horizon, with the advancement in x-ray technologies.

"Our LEAP system (see stories on page 9) started as a single energy x-ray, which showed bones, but by advancing to a dual energy x-ray it is possible to now differentiate between fat and muscle," Christian said.

"X-ray technology that not only precisely cuts to separate higher value and lower value cuts, but which can provide objective carcase measurements offers a direct benefit to producers.

"This feedback mechanism can give producers data about the yield of every animal."

So, where to from here? Christian said future projects will develop carcase measurement technology to further value-add lamb and beef processing.



Christian Ruberg, MLA
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Read about two of the innovations →



Doing the brisket: Ovine Brisket Cutter

What: A robotic cutter which splits the brisket post slaughter.

How it works: This system identifies the navel end of the breast bone and a circular saw cuts the breast bone down the centre.

Processor benefit: Installing an Ovine Brisket Cutter can deliver savings to a plant through decreased labour requirements, reduced workplace injury and improved yield and food safety. The technology saves one labour unit a shift, so if a plant has high staff turnover this can reduce training and recruitment costs, and redirect expertise to other areas. A cost benefit analysis estimates a net benefit of up to 5¢/head, which adds up when processing one million lambs a year.

Commercial reality: Now available at \$150,000/unit.

Partners: The Ovine Brisket Cutter was funded by the MLA Donor Company and technology partner Machinery Automation Robotics (MAR).

Taking a leap forward

A new automated lamb processing system is delivering supply chain competitiveness, higher yield, labour savings and consistent quality at JBS' Bordertown plant.



Jumping ahead: LEAP3/4 lamb processing automation

What: X-ray guided automated lamb primal cutting and middle processing systems.

How it works: The first task in lamb deboning is to break the carcass into smaller portions. In the same way the medical industry uses x-rays to look at bones in humans, LEAP uses an x-ray system to find specific bones in lamb carcasses and cut between them. The lamb primal system (LEAP3) separates carcasses into shoulder, middle, and hindquarters, while the middle system (LEAP4) breaks the rack barrel into various sub-primal components.

Processor benefit: Both systems deliver labour productivity, increased product value, yield improvement and improved boning room efficiency. Different cuts have different values so the precise cutting lines increase value of product by not leaving higher value meat on a lesser value cut. Thanks to precise cutting lines, improved throughput and processing efficiencies, LEAP3 has increased the value of the carcass by \$1.30-\$1.40/head and LEAP4 by \$3.20-\$4.20/head.

Commercial reality: LEAP3 and LEAP4 are operating at two sites (JBS and the Australian Lamb Company), and are commercially available for around \$4.5m (for the complete system).

Partners: The LEAP system was co-funded by the MLA Donor Company and technology partner Scott Technology.

JBS innovation manager Graham Treffone first encountered the 'LEAP' system in 2011 when he visited the Scott Technology facility in New Zealand.

"Coming from a beef processing background, it was hard to imagine how a 24kg lamb carcass could add so much complexity and variation into a processing business," he said.

"This complexity increases cost and requires accuracy and consistency, so I was impressed to see that the LEAP system used x-ray technology to determine coordinates for accurate cutting. This precise cutting presented JBS with the opportunity to take inconsistencies out of cutting carcasses and maximise high value cuts such as the loin and rack."

The team at JBS did the calculations, and based on potential savings through reduced labour, increased yield and the 'knock-on' effect of reducing work place injury risk, the project was given the green light.

Installation began in June 2013 for the LEAP primal cutting system, and in early 2014 for the LEAP 4 middle cutting system.

The JBS criteria on this project was payback within two years. The return on investment for the LEAP technology was estimated to be 1.27 years, and Graham is confident this will be achieved.

He said a critical component of investing in LEAP was the associated R&D support from the partnership between JBS, the Australian Meat Processing Corporation and Scott Technology, and MLA through matched government dollars. No producer levies were used to support this value chain innovation.

"One challenge was variation in carcasses between sheep breeds, size and weight in Australia, quite unlike those in New Zealand," he said.

"We worked with Scott Technology to adapt the system to ensure consistency, regardless of carcass size."

A cost-benefit analysis found the net benefit of the technology was a minimum \$2.04/head through reduced handling, labour savings, and consistency in product quality and processing.

"The system delivers our customers quality and consistency - they can now expect a consistent number of ribs in every rack, loins that are the same size and so on," Graham said.





“Today the Bordertown plant runs at a consistent process speed of 10 lambs/minute. This is an increase on the average manual throughput of nine lambs/minute and delivers cutting accuracy, consistent presentation, extended shelf life and improved safety with less risks than before.”

The LEAP system has replaced seven full time labour units. Two of these were trained to operate LEAP while the balance has been redeployed into alternate positions. The Bordertown plant has since added a second shift around the same time LEAP was installed - creating 200 new jobs.

Looking ahead, Graham said if the expected payback period was achieved, LEAP installations would be considered at other JBS plants.

He was also awaiting the outcome of an MLA-supported Murdoch University project looking at the potential use of dual source x-ray to provide more information about carcass characteristics such as lean meat yield, which would provide valuable producer feedback.



The LEAP system in action in the Bordertown plant.

In profile Labour efficiency

Alen Alempijevic // Robot trainer



Robotics researcher Alen Alempijevic tests the 3D imaging technology on cattle.

The new age cattle classer probably won't hold you up chatting in the yards, or want to stay for a cup of tea. You'll just turn it off when its job is done.

The University of Technology Sydney (UTS) researcher and robot 'teacher' Alen Alempijevic is developing an artificial intelligence system which uses a 3D camera to measure carcass traits of cattle, in an MLA-funded project. This 3D trait estimation will offer producers an objective tool to assess carcass information and aid management or marketing decisions. It could be a reality in saleyards or even on-farm in the next few years. The gain for producers could be more consistent classing and improved market compliance.

What is this project about? It uses a RGB-D camera (available off-the-shelf) to take 3D images of an animal as it passes through a crush. It 'sees' 30 times a second and uses these samples to identify fat or muscle deposits and estimate fatness, muscle and condition score.

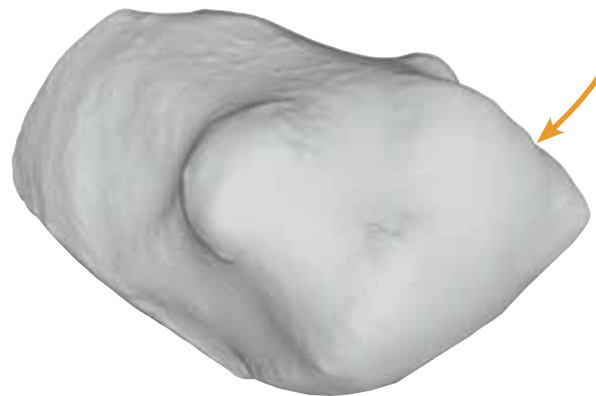
How do you train the machine to recognise those traits? We analysed the reasoning used by expert cattle assessors when visually assessing fat and muscling. An animal deposits muscle and fat in different areas of the body which results in different shapes. Humans do not perceive dimensions accurately, however we are inherently capable of discriminating shape differences. For example, we could identify a shape as more or less round, but cannot visually determine if something is bigger by a few millimetres. The next step was to turn a shape - such as muscling - into a mathematical description and assign it a value. For example, for a given animal we made a mathematical description of the shape and we took a P8 measurement from an ultrasound and



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Above: What human eye can see. Below: What the 3D camera 'sees'.



muscle scores from expert assessors. We then taught the machine to estimate a P8 score and muscling based on the shape of the animal it 'sees' when capturing 3D information.

How 'intelligent' is the machine? If a shape is completely novel and has not been previously seen, the computer can request some information for it to expand what it has learnt thus far - in the same way a person builds on their experience.

Is this trait estimation technology new? We have only recently become capable of capturing 3D information at significantly high precision using RGB-D cameras. This technology really only became sufficiently accurate, fast and commercially affordable in 2011, which has spurred the research.

Is it a first for the red meat industry? This project evolved from an earlier collaboration between NSW Department of Primary Industries (DPI) and MLA to estimate the height of livestock with a laser. MLA also worked with NSW DPI under the Beef CRC to develop the BeefSpecs calculator to assist producers meet market specifications. This joint MLA/UTS/DPI project began in 2012 to use 3D cameras for more advanced analysis of traits.

Is this technology used in other industries? RGB-D cameras are also used to maintain the Sydney Harbour Bridge. Painting the bridge is difficult and dangerous, so UTS developed a robot which relies on 3D imaging to assess where to sandblast the framework prior to painting.

Did you face any unique challenges in developing a tool for the beef industry? Cattle are very different to the Sydney Harbour Bridge - they tend to lick or kick new things in their environment. We had to be crafty in designing the system to minimise impact. Cattle became quickly acclimatised to our setup of cameras as it is not invasive technology. We also needed durable technology, so we envisage that the commercial tool will incorporate layers of film, the same as Formula One drivers use on their visors. If the top layer of film becomes wet or dirty - obscuring the lens - it can be removed. The infrared pattern (which creates the 3D image) isn't visible in full sunlight so the cameras need to be used undercover but many producers already have a roof over their scales and livestock handling area.

Could this technology be applied in other ways for the livestock industry? We are fortunate that Australian producers are willing to embrace technology - not just for change sake, but to make better decisions and improve production. Artificial intelligence could also be used to assess animal health by monitoring behaviour (such as lameness) or even provide a self-drafting tool by recognising phenotypic differences such as size and gender.

Where to from here? We have only used the trait estimation tool on Angus cattle so the next step is to validate the technology on cross-bred cattle. MLA has filed a provisional patent for this technology and is currently working on commercialisation.



Research at work

The latest on-farm strategies emerging from MLA's investment in research, development and extension.

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Geoff Niethe explains how to lift reproduction rates in northern cattle herds.

Taking care with cattle

A well planned approach to managing cattle health and welfare has benefits for producers, animals and the broader community.



Animal health and welfare

Animal welfare spotlight: careful heifer management critical for calving

Age and weight of heifers at joining, birth weight of bulls and nutrition are critical factors which need to be managed to avoid calving difficulty, or dystocia, among first-calf heifers.

The major cause of calving difficulty is a calf that is too large to emerge from a birth canal that has not fully developed.

For British breed heifers, the recommended minimum mating values are a joining live weight of 300kg - rising to 365-400kg for French breeds - a mating age of 15 months, and a condition score of 3.0-3.5 from joining through to calving.

In northern breeding systems, the critical mating weight for *Bos indicus* heifers is usually 320-350kg, depending on genotype.

The average age of Brahmans at puberty is around 25 months and dystocia is less common among *Bos indicus* heifers, as they tend to have lower birthweight calves.

In northern situations, where yearling mating (ie joining from 15-18 months) is practised, there is potential for more dystocia, so heifers must be managed carefully.

As sire selection has a major impact on calf birth weight, producers are advised to choose bulls with EBVs for 'calving ease' and 'low birth weight'. If such sires are difficult to source, then other options such as half-sibling sires (though not large birth weight) or breeds with known low birth weights are recommended.

Finally, if veterinary assistance is not available, learn the basic fundamentals of calf delivery, as a little assistance can often help correct the problem.

Management responses include:

- supplying adequate nutrition and parasite control throughout growth to provide optimum conditions for pelvic growth, without causing over-fatness;
- selecting low birth weight sires; and
- keeping bulls away from heifers until they are sufficiently mature.

Tools and resources:

More Beef from Pastures: www.mla.com.au/mbfp/Weaner-throughput/1-Maximise-live-calves

FutureBeef: www.futurebeef.com.au/topics/breeding-and-genetics/heifer-and-breeder-management/

Heifer Management in Northern Beef Herds second edition: www.mla.com.au/heifermanual



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Mick Quirk, MLA // E: mquirk@mla.com.au

→

Adopting a sound health management plan ensures disease is controlled in a cost-effective way that maximises herd production potential and profit, according to Dr Jim Rothwell, MLA's Sustainability R&D Program Manager.

"A sound plan also ensures community expectations of the highest possible animal welfare standards are met. This is an issue of increasing importance to producers," he said.

"MLA is proactively addressing community concern regarding animal welfare and, to that end, we've worked closely with governments and peak industry bodies to develop the new Australian Animal Welfare Standards and Guidelines for cattle and sheep."

The standards and guidelines, while yet to receive official ministerial endorsement, are expected to form the basis of state and territory animal welfare laws.

As well as facilitating consistent legislative protection for livestock, MLA invests about \$4.5 million a year in cattle health and welfare research projects and extension programs, which enable producers to proactively respond to animal welfare in the areas of on-farm management, livestock handling and transport and product quality.

Health and welfare R&D work is undertaken on-farm, in feedlots and throughout the various stages of livestock export and beef and lamb production.

MLA's More Beef from Pastures (MBfP) and MLA's partnership with the FutureBeef

program can help cattle producers in southern and northern Australia, respectively, achieve sustainable and profitable productivity gains. The programs draw on the latest research, as well as the knowledge, skills and experience of producers and extension staff.

While the programs cover a wide range of topics, including pasture growth, nutrition and marketing, *Feedback* has summarised some of the key points relating to best practice cattle health and welfare management on pages 14-15.



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See pages 14-15 for tools and resources for best practice management for cattle herd health and welfare →

Animal health and welfare

Best practice management for cattle health and welfare

Procedure	Strategy	Tools and resources
Disease prevention	<p>Choose the appropriate management practice, corrective treatment or a combination to prevent common diseases or disorders:</p> <ol style="list-style-type: none"> Know the common cattle diseases in your locality. These may be caused by: <ul style="list-style-type: none"> infections from bacteria, viruses or fungi parasite infestations nutritional deficiencies, excesses or imbalances metabolic disorders. Use local and veterinary advice to develop an integrated disease management plan. 	<p>MBfP Tool 6.7 - <i>Cattle disease guide</i> provides a list of common production and reproduction diseases and conditions for their likely occurrence.</p> <p>Northern beef disease information: www.futurebeef.com.au/topics/health-and-disease/</p> <p>For information on infectious and nutritional reproductive diseases: www.mla.com.au/Livestock-production/Genetics-and-breeding/Cattle/Reproduction/Reproductive-diseases</p>
Vaccinations	<p>Determine the risk and vaccinate to prevent specific diseases:</p> <ol style="list-style-type: none"> Assess whether potential loss is more than the cost of the vaccination program using the MBfP Health Cost Benefit Calculator. Assess whether the disease poses a risk to human health. Zoonotic diseases (that affect both cattle and humans) include: <ul style="list-style-type: none"> leptospirosis Q-fever campylobacteriosis milker's nodule brucellosis tuberculosis cryptosporidiosis yersiniosis salmonella listeriosis ringworm anthrax Assess the current disease risk status of your enterprise now, then regularly reassess. Monitor regularly: <ul style="list-style-type: none"> conditions likely to lead to the development of common cattle diseases (MbfP Tool 6.7) presence of signs of disease that can be prevented by vaccination (MBfP Tool 6.2) potential loss compared to the cost of a vaccination program (MBfP Tool 6.1) recent cattle prices, to determine the cost-effectiveness of vaccination. 	<p>MBfP Tool 6.1 - <i>Health Cost Benefit Calculator</i></p> <p>MBfP Tool 6.2 - <i>Cattle disease vaccines and strategies</i></p> <p>MBfP Tool 6.7 - <i>Cattle disease guide</i></p> <p>Northern beef vaccination information: www.futurebeef.com.au/topics/husbandry/vaccinations-for-beef-cattle/</p>
Monitor and record	<p>Watch for sporadic diseases and disorders:</p> <ol style="list-style-type: none"> Record dead or diseased cattle and map areas where deaths occur. Collect abattoir feedback whenever possible. Seek veterinary advice for unexplained health problems. Regularly observe animals grazing at pasture and occasionally weigh a 10-20% sample to record and monitor liveweight gain or loss. 	<p>Use the <i>Animal Health and Disease Investigation</i> (2nd edition) guide: www.daff.qld.gov.au/animal-industries/animal-health-and-diseases/protect-your-animals/animal-health-and-disease-investigation-2nd-edition</p>

Procedure	Strategy	Tools and resources
Biosecurity	<p>Adopt biosecurity strategies to reduce the risk of introducing an infectious disease, and spreading an infectious disease:</p> <ol style="list-style-type: none"> 1. Quarantine introduced stock. 2. Check the disease risk of all introduced cattle and, ideally, only purchase stock known to be disease-free. 3. Ensure boundary and internal fences are stock-proof. 4. Use effective drenches to prevent the introduction of gastrointestinal parasites and fluke. 5. Restrict use of yards and handling facilities to your own stock. 6. Ensure visiting vehicles remain in the house area. 7. Continually monitor livestock for signs of disease. 	<p>Use MBfP Tool 6.7 - <i>Cattle disease guide</i> to:</p> <ul style="list-style-type: none"> • assess the risk of introducing infectious diseases into your herd • know the symptoms of common diseases and carefully check all cattle introduced onto the property • take immediate action to prevent the disease spreading if your herd contracts an infectious disease • report a suspected notifiable disease to your local vet or telephone the Emergency Animal Disease Watch Hotline on 1800 675 888. <p>Visit the Farm Biosecurity Program's website: www.farmbiosecurity.com.au/</p>
Welfare management	<p>Check all health, nutrition, climatic and management factors that can affect cattle welfare:</p> <ol style="list-style-type: none"> 1. Monitor condition scores to achieve production targets while ensuring physical welfare. 2. Apply management practices and techniques to prevent diseases. 3. Use low-stress stock handling methods and well-designed facilities that exploit natural livestock behaviour. 4. Audit all factors that could affect cattle welfare. <p>Meet nutrition targets for all cattle classes.</p> <p>Keep animals free from diseases.</p> <p>Follow national and state codes of practice.</p> <p>Follow guidelines for the transport of cattle.</p> <p>Undertake routine husbandry procedures correctly:</p> <ol style="list-style-type: none"> 1. Plan husbandry procedures to minimise stock handling and maximise disease control. Where possible, combine procedures. 2. Ensure the correct technique for invasive husbandry procedures that cause pain, including adherence to 'correct age' guidelines and hygiene requirements. 3. Undertake uncommon procedures, such as tail docking, only where there are welfare benefits for the animal or when prescribed by a veterinarian. Some procedures are prohibited in some states. 4. Ensure people handling livestock are skilled and competent. <p>Manage breeding heifers to minimise dystocia (see story on page 13)</p> <p>Develop a disaster management plan which includes:</p> <ol style="list-style-type: none"> 1. What feed and water options do I have for the livestock? 2. How much will it cost to feed or water my stock for a specified time? 3. Do I feed, sell or agist my stock, or do a combination of all strategies, to manage the impact of the event? 4. How will my decision affect my herd and financial position this year? And next year? 5. Is it better to buy or breed in the recovery phase? 	<p>Use MBfP Tool 6.5 - <i>On-farm animal welfare compliance</i>. This tool provides a checklist of important factors potentially affecting cattle welfare on-farm.</p> <p>When cattle come under stress from naturally occurring events, such as drought, use <i>A national guide to describing and managing cattle in low body condition</i> - download at www.mla.com.au/lowbodycondition</p> <p>Use the <i>Is it fit to load?</i> guide, which features pictures and simple explanations to help determine if cattle are fit for transport. www.mla.com.au/fittoaload</p> <p>For northern producers, refer to the guide <i>Heifer management in northern beef herds</i> to minimise calving difficulty. www.mla.com.au/heifermanual</p> <p>For southern producers, refer to the MBfP procedures for managing heifers to avoid dystocia. www.mla.com.au/mbfp/Weaner-throughput/1-Maximise-live-calves</p>

Market compliance

Happy cattle helps compliance

Debbie McBryde and her manager, Mervyn Mason, have proven that effective management, driven by animal welfare priorities, can deliver more than 90% MSA compliance year after year.

When Debbie McBryde returned to the family property after a long absence, she wasn't even sure she would know how to live away from the city - much less run a cattle enterprise.

Debbie's decision to stay was complemented by a stroke of good luck in meeting Mervyn Mason - a cattle man with extensive experience in the Top End - who is now her manager.

During the past five years they have forged an unorthodox, holistic style of management on 'Oombabeer', the property established by Debbie's parents in 1967. They run it as a trading block turning off pure or high content Brahman steers specifically for the MSA market: ideally at 0-2 teeth and between 6-22mm of P8 fat and 180-340kg carcass weight.

Meeting the market

Oombabeer's beef enterprise became MSA accredited in 2009 and, since then, its steers have consistently achieved high eating quality results. Last financial year, Debbie and Mervyn turned off 442 head



Manager, Mervyn Mason and staff.

and achieved 92% compliance to MSA minimum requirements (the Queensland average compliance was 92%).

The steers' ossification scores were generally about 130 and consistently had MSA index values of 50-57 (putting them in the top 50% for eating quality). This score, ranging between 30 and 80, rates the potential eating quality of the carcass - the higher the score, the better the quality.

Mervyn said the secret to meeting the specifications lay in the type of animals bought in, as well as the on-farm management.

"The weight and age of cattle we source varies depending on the season, but they need to be good quality, well conformed and deep in the body. Ideally, they are Brahman because we like their intelligence and doing ability," he said.

Usually, Debbie and Mervyn prefer to buy animals direct from trusted producers, however, when drought has affected their usual suppliers, animals have been sourced from saleyards.

The property runs 600-700 steers with 400-500 sold between January and May/June each year, when they meet specifications. New cattle are purchased in October and March.

Trigger points for sale include being more than 600kg liveweight and a fat depth of 6-22mm, based on visual assessment.

Proximity trumps price

It's non-negotiable where the steers from Oombabeer are sold.

"I don't sell to the highest bidder," Debbie said.

"It's a top priority for me that our animals suffer the least stress possible, so I sell to the nearest processor, 130km away. We bring the mob close to the yards and put



Debbie McBryde with Wally, one of their Brahman coaches.

them on quality feed the day before they are transported. We load out as late as possible to have them arrive before curfew."

Oombabeer steers are contented steers

Mervyn and Debbie's unwavering concern for the animals' welfare underpins their entire management strategy.

"We're in the business of producing happy beef," Debbie said.

Year round, mobs of 100-200 animals are grazed on two-week rotations around 20 paddocks. Conservative stocking rates ensure there is always ample feed available and stock are moved using four-wheel bikes and dogs.

"Cattle in their natural state like to roam and I think changing paddocks and being able to access a diverse range of vegetation is both nutritionally and psychologically beneficial," Debbie said.



Snapshot

Debbie McBryde,
Moura, Qld.



Property:
3,482ha (1,215ha
share-farmed -
sorghum, wheat,
chickpeas)

Enterprise:
Trading, growing
out steers for MSA
Japan Ox market

Livestock:
600-700
Brahman steers

Pasture:
Improved (buffel,
secca stylo,
Rhodes grass);
native grasses
(black spear,
white spear,
kangaroo and
windmill grass)

Soil:
Brigalow, Bauhinia
country with
cracking black soil
and about 405ha
of sandy loam

Rainfall:
650mm



Debbie and Mervyn believe keeping stress to a minimum is one of the main reasons why their animals consistently grade MSA.

The mobs have a mobile lick system that travels with them, containing individual salt, sulphur, copper and other single trace element blocks, which they can access anytime.

Each mob of newly purchased cattle has a pair of 'coaches' put with them - older pet steers that teach them the ropes and help them settle quickly.

The steers become so settled and trusting that buffalo fly treatments are carried out in the paddock. A roll of hessian makes a yard against a fence and animals are sprayed as they walk past Mervyn, using a 20-litre hand pump.

Despite their success in consistently producing quality beef, Debbie and Mervyn are the first to admit that hitting company specifications and - in the early days - making sense of kill sheets to find why animals didn't grade, was no walk in the park.

"It was hard until we got a handle on what the animal in front of us was, and how it would look on a kill sheet," Debbie said.

"We spent a lot of time on the phone talking to meat buyers and working it all out.

"Sometimes dentition and ossification seemed contradictory, and this is more evident now that the new MSA Index is accessible online to registered producers at the myMSA website, which is well worth understanding and working with."

Mervyn said the most common reasons 'Oombabeer' steers met MSA requirements but failed to meet processors' specs were: too many teeth, not enough fat or too heavy.

"One of the biggest challenges to producers becoming more educated on how to meet both MSA and processor specs is the lack of communication between the two," he said.

"No one talks about how their cattle performed or what they got for them, which gives producers little chance for comparison.

"If we could change that cultural mindset to one of knowledge sharing, I think we'd all progress much faster."



Debbie McBryde

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To register for MSA accreditation visit:
www.mla.com.au/msa

To access your MSA Index values for
MSA graded cattle visit:
www.mymssa.com.au

For the complete MSA Tips and Tools
Kit visit: www.mla.com.au/msabeef



To watch a video on an MSA carcass
being graded visit: www.youtube.com/watch?v=LpDsm-SLgNc

Pastures



Legumes pass drought test

Research agronomist Dr Belinda Hackney has been evaluating the performance of hard-seeded legume varieties in NSW farming systems for the past 13 years.

Belinda, who works for Charles Sturt University (CSU), said the big test for these legumes was the drought period and their performance was surprising, because traditional legumes were just not working.

"These varieties out-yielded traditional legumes, such as sub-clover, three- to eight-fold (depending on where they were planted)," she said.

Since 2007, Belinda has led the MLA-funded Pastures Australia project 'Agronomy and Management of New Annual Legumes', which has delivered on-farm management packages for biserrula, bladder clover and French serradella.

Her current MLA-funded project work is examining how the plants behave under different climatic conditions.

"The legumes are behaving quite differently in NSW, compared to how they behave in Western Australia," Belinda said.

"For example, biserrula is extremely hard-seeded in Western Australian situations. Producers there will sow it in year one, allow it to set seed and then crop over it in year two, as very little comes up in that second year due to high hard seed levels.

"They might then crop over it for several more years before allowing it to regenerate from seed set in the first year.

"By contrast, in NSW, biserrula has always regenerated strongly in the second year.

"We've just come out of our first large-scale, on-farm 2:2 pasture-crop rotation, and the biserrula has regenerated beautifully in the fifth year."

Belinda is now turning her attention to the legume pastures' potential for prime lamb production.

"In spring, we started tracking liveweight gains and condition scores on prime lambs grazing the legumes," Belinda said.

"Over summer, we'll be looking at the feeding value of the dry residue for maintaining ewe condition and whether these legumes can make a substantial difference to the need for supplementary feeding over that period.

"We'll also conduct pen feeding trials at CSU in Wagga Wagga, because these legumes have a lot of potential as conserved forages.

"We hope to have our first animal production data by autumn and we'll update our information packages as that data becomes available."

Above: Biserrula in May 2014 regenerating following the cropping phase. Regeneration occurring from seed set in 2010. No additional seed was added and no seeding occurred during the cropping phase.



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Biserrula proves its worth

When Mike O'Hare was featured in Feedback in August 2013 he was cautiously optimistic that the hard-seeded legumes he began planting in 2009 would regenerate well after a cropping phase. Now he is seeing the proof of long-term research borne out in the paddock, and he couldn't be happier.

Mike O'Hare in one of his pasture paddocks sown with biserrula

Mike said biserrula, in particular, had proved to be everything he had hoped and more.

"To see it regenerating after a cropping phase is a real eye-opener - it's magnificent," he said.

Mike is growing biserrula, French serradella, bladder and gland clover on 'Greendale' in the central Riverina.

His approach, so far, has been to moderately graze the legumes in the establishment year, then allow them to set seed.

In the following year, he allows the legumes to regenerate and grow through until late August or early September, so the pastures don't get an opportunity to set seed in that year. This is done to conserve moisture for the crop.

The pastures are generally grazed from germination in the second year through to spray out, and the residue is then used as a standing hay crop.

The intensity of grazing varies from paddock to paddock, but the aim is to keep enough groundcover to prevent erosion in summer, but have it grazed down for easy sowing in the autumn.

Canola is sown as the first crop, followed by wheat. Pasture then regenerates from the seed bank following the wheat crop.

So, effectively, the legumes have only been able to set seed one year in four.



Snapshot

Mike and Velia O'Hare, Beckom, NSW.



Property:
2,200ha

Enterprise:
Wheat, canola and prime lambs

Livestock:
1,500 Wiltipoll x Dorper and Wiltipoll x Australian White ewes

Pasture:
Mix of lucerne and annual legumes

Soil:
Medium loam to heavy clays

Rainfall:
475mm



A handful of biserrula pods on the O'Hare's property

Legume management guides:

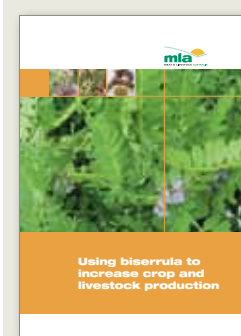
Using french serradella to increase crop and livestock production

www.mla.com.au/frenchserradella



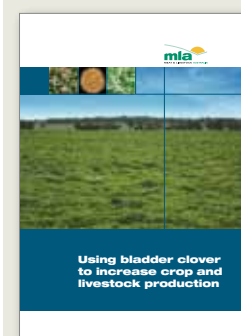
Using biserrula to increase crop and livestock production

www.mla.com.au/biserrula



Using bladder clover to increase crop and livestock production

www.mla.com.au/bladdercllover



"The first paddocks to go through the cropping phase have come back into pasture this year, and all have regenerated strongly," Mike said.

"They were clean in terms of weeds and now, by July, I had knee-high regenerating biserrula.

"It is such a tremendous advantage financially and on a time basis to have pastures regenerate after a cropping phase without the need for re-sowing, and they are up and ready to go like an established pasture in that regeneration year, too."

Measurements taken by Dr Belinda Hackney in May supported Mike's observations.

Belinda took herbage biomass cuts from regenerating stands of biserrula, French serradella and bladder clover pastures coming out of crop phase in the third week of May.

"These pastures started to regenerate in early March following good rain," Belinda said.

"In the regenerating biserrula pastures there was 1,800-2,500kg DM/ha, 1,600-2,000kg/ha in the French serradella and 1,200-1,800kg DM/ha in the bladder clover.

"To have this amount of feed on offer going into winter was an incredible bonus. If you had to re-sow a traditional sub-clover based pasture following a cropping phase, it would have only just gone into the ground and you would expect little first year grazing from it.

"Mike had sheep on some of these pastures since March, and those which weren't grazed set him up beautifully for winter."

It is not only the autumn to spring grazing that is proving valuable, but the feed value the legumes are offering during Beckom's extended dry summers.

Mike was particularly impressed with the ability of biserrula residue to carry sheep through summer.

Last year he had ewes grazing biserrula residue and pod through summer and they "did very well on it".

"We also had lambs grazing biserrula residue pasture and it kept them going along nicely through summer - we only started to supplement them with a bit of grain in late February," he said.

Mike is still harvesting seed from some paddocks and establishing pastures in others, so he's "not getting carried away with heavy stocking".

"But given what I've seen from the pasture regenerating after its first cropping phase, I'm pretty excited about being able to lift stocking rates in a year or two," he said.



Mike O'Hare

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Read the earlier feature on Mike in the August 2013 edition of *Feedback* at www.mla.com.au/feedback

Market compliance

An ultra-performer

Central Queensland beef producers Ian and Kate McCamley have been using the UltraMac fat-depth scanner in their finishing enterprise since late 2011 and have learned “through trial and error” how to make the most of the device.

Snapshot

Ian and Kate McCamley, Rolleston, Qld.



Property:
26,000ha

Enterprise:
Finishing steers on grass to EU and PCAS specifications

Livestock:

Turning off 3,500-4,000 head annually - average turn-off a 600kg bullock

Pasture:

Predominantly buffel grass

Soil:

Scrub soils, sandy loam and duplex soils

Rainfall:

600-650mm



Image courtesy of AgForce Queensland.

When Ian McCamley appeared in *Feedback* magazine in August 2013, he said the fat-depth scanner meant the difference between receiving a \$250/carcase premium for hitting EU (European Union) market P8 (rump) fat specifications, or missing out.

Since the advent of the Pasturefed Cattle Assurance System (PCAS) and the offer of significant premiums for PCAS cattle in Central Queensland, the scanner is now helping Ian secure premiums of up to \$315/carcase.

“The PCAS premiums mean the fat scanner is meaning a lot more to us in dollar terms than it did just 18 months ago,” Ian said.

“When the big PCAS premiums are running in Central Queensland during June to September, there are times you could lose \$1/kg on a 315kg dressed weight animal for not hitting the specifications.

“In our case, prior to using the scanner, we had a good handle on all the other

specifications. What we could only guess was the fat and, invariably, not all that accurately.

“The scanner has improved our compliance considerably - it’s an integral part of our business.”

The McCamleys have been using the scanner since hosting a market compliance MLA Producer Demonstration Site in late 2011.

They learned to use it as part of the PDS investigations and now, according to Ian, “we’ve pretty well honed our skills through trial and error”.

Since his appearance in *Feedback*, Ian has taken about 40 telephone calls from producers interested in the technology and here he shares some of his insights and learnings.

Ian’s top tips

1. Use the scanner correctly

“You have to know where the P8 site is located, and you have to apply vegetable oil evenly and liberally to the site. We use a backline product applicator gun, because it goes on in a good even band. We buy bulk vegetable oil from food wholesalers.

“You then have to move the scanner around a bit to find the right spot. Once you’ve done enough cattle you’ll get the feel.”

2. Cross-check results

“You must record your scanning results for each animal and then cross-check with the carcass data on the processor’s kill sheets.

“If you’re finding the two sets of results aren’t correlating when one particular person is using the scanner, you can give them a bit more training.”

Ian also uses cross-checking to ensure he doesn’t miss out on premiums due to human error at the abattoir.

“When we see an odd, low fat measurement on our kill sheets, such as 5mm, we look in our records and see what we measured it at.

“If there’s a discrepancy we ring up the processor and ask for someone to go back to the carcass while it’s still in the chiller and re-measure the P8 fat.

“We’ve had a reasonable number changed as a result.

“The processor knows we’ve carefully measured the cattle and have the hard data, and they understand human error can occur in a big plant, so they’ve been quite happy to follow up for us.”

3. Use the scanner for more than compliance

“We turn off 3,500-4,000 head each year and fat depth scan everything that leaves the place at least once - nowadays about one-third are done twice.

“To comply with low-stress handling requirements, we scan the cattle about two to three weeks before they’re due to be sold, but we also use it about two to four months before their expected turn-off, as a management tool.

“While we draft cattle on weight ranges and put them in finishing paddocks, we can also draft them on fat depth. This allows us to select cattle that are nearly meeting specifications, but not quite, and allocate them to the best available paddock.

“Scanning also identifies the animals that are tending to run to fat early so we can treat them as a separate mob, because they’re not very efficient. If they’re just going to lay down fat we’d rather get rid of them and go buy a better quality replacement.”



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Interested in starting a PDS? Contact **Renelle Jeffrey** // E: rjeffrey@mla.com.au

Read the article featuring Ian in the August 2013 edition of *Feedback*:
www.mla.com.au/feedback

Read more about the P8 site and its evolution at www.mla.com.au/p8

Scanning for profit

Darryn and Chloe Atkinson purchased an UltraMac Fat Depth Scanner after reading an article in *Feedback* and speaking to fellow producer Ian McCamley. The scanner is now a crucial part of their business.

Darryn and Chloe bought the scanner in April 2014 and have been subtly altering their management practices to get the most value from their new tool.

"No animal leaves the property without being scanned," Chloe said.

"This device is now a crucial part of our business."

The couple runs a beef breeding and fattening enterprise with Darryn's father David.

They produce cattle for the EU market and need a minimum P8 (rump) fat depth of 6mm to meet market specifications.

The Atkinsons have been EU accredited for four years and, prior to purchasing the scanner, experienced great variance in their market compliance.

"We have a small feedlot here which we run from August to November to finish steers for the EU market," Chloe said.

"We found we were putting extra feed and time into the cattle but they were still often missing the P8 fat specifications - it was

quite heartbreaking when the kill sheets would come back and it was costing us up to \$150/animal in lost premiums.

"The scanner cost about \$3,500 and our market compliance for the P8 fat specifications is now about 97%.

"We paid for the scanner in the first hour of using it on the feedlot cattle - we only needed to push aside about 20 head we would otherwise have sold, because they were definitely heavy enough.

"The scanner also saves us money by allowing us to turn off cattle earlier than we usually would, because we have the confidence of knowing they're definitely going to hit both the weight and fat spec."

Bang for buck

Since using the scanner the Atkinsons have been surprised to find little correlation between the weight and P8 fat depth of their animals.

"We've used it a lot lately on cattle coming out of the feedlot and we're finding there is no correlation between weight and fat," Chloe said.

"We see steers that we would traditionally have sent away - they're big and they're heavy - but when we scan them there's no fat."

The Atkinsons are now going to use the scanner in their mixed breed herd to investigate which of their breeds lay down fat most efficiently.

They plan to incorporate the use of the scanner with a walk-over weighing and NLIS data recording system, to be installed early next year, to track their cattle from weaning to slaughter.

Tips for scanning success

"Scanning can be time consuming but much of it depends on how your cattle run through your yards," Chloe said.

"We put a lot of emphasis on getting our weaners to run through the race well. During the week they're in the yards for weaning we run them through the race at least once a day.

"Darryn has also equipped himself to make it as efficient as possible. He has a backpack to hold the oil, a holster on his hip for the oil applicator gun, while the scanner is on his other hip.

"Our yards are also well set up with a platform on the side of the race so you can lean over the top of the cattle, which makes it much quicker.

"It takes Darryn about 30 seconds to two minutes/beast.

"The hardest part is knowing where to place the probe in terms of hip bone, pin bone etc, but the scanner comes with an instruction manual and it didn't take long to pick it up."

Reader limits

On the downside, Chloe said it's hard to get a reading on low fat levels, an experience backed by the results of a trial undertaken by the University of Queensland's Dr Geoffrey Fordyce and colleagues. They found the UltraMac device would not read below 4mm.

"For low fat it just returns a zero - we normally just bush (send back to the paddock) those ones," Chloe said.

"We've also had a bit of trouble getting a reading off dusty cattle, because we haven't had any rain.

"We spoke to the distributor and he advised us to give the site a good scrub with a curry comb to loosen the dirt, before applying the oil. It worked."



Darryn and Chloe Atkinson
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Snapshot

David, Darryn and Chloe Atkinson, Marlborough, Qld.



Property:
8,900ha

Enterprise:
Beef cattle - breeding and fattening for EU market

Livestock:

Mixed breed cattle herd, Santa Gertrudis base. Run approximately 600 breeders and keep all progeny through to slaughter

Pasture:

Brigalow and forest country, buffel grass and black spear grass

Soil:

Clay soils through to sandy loams

Rainfall:
800mm

Darryn Atkinson from 'Neerim', Marlborough, with the UltraMac fat-depth scanner.



Business management

Cutting back to make money

When Scott and Regina Michell wanted to finetune their farm business, More Beef from Pastures (MBfP) principles played an integral part in improving profit and cutting costs.



The concept 'less is more' is certainly not contradictory for Scott and Regina Michell (pictured above), who run a cattle and sheep enterprise near Narrabri, NSW - it's the ultimate farming truth.

Six years ago dry seasons forced them to downsize their breeder herd by 20% and cut their sheep flock in half. After some experimentation with MLA's beef cost of production calculator, their suspicions were confirmed - there was actually more profit in running less.

Their journey of discovery continued when the couple joined a Beef CRC producer group and then later the Bingara/Barraba Beef Profit Group.

"We not only learnt about the More Beef from Pastures (MBfP) principles, in particular how to measure costs and production, improve fertility and better manage pastures, but also had access to the wealth of shared wisdom that other producers brought to the group," Scott said.

"It now has more than 20 producer members and I don't think any two do things the same way.

"Applying the MBfP principles has particularly helped us change the way we think about measuring productivity and profitability from a per head basis to how much beef/ha we produce."

Since 2008, productivity has increased from 98kg/ha to 123kg/ha, an improvement of 25%, despite the Mitchells dropping their Angus breeder herd from 500 to 400 cows.

Fewer numbers created another windfall - cows no longer had to be fed during winter, reducing their costs by a further 15%.

"We're now able to finish our steers properly to meet Meat Standards Australia, Pasturefed Cattle Assurance System (PCAS) and EU specifications," Scott said.

"Before we always intended to but, because of our stocking rates, we could never get there. Most of the time we had to offload early to the feeder market."

Now, most steers meet PCAS specifications and are processed, at 18 months to two years, in Brisbane at 550kg liveweight. Excess heifers are sold as weaners on Auctions Plus.

Scott and Regina's epiphany that less is more has led them to scrutinise their management practices and, in particular, to improve herd fertility and pasture management.

"For two years we've shortened our joining period to six weeks for cows which allowed us to identify our most fertile breeders and cull poor performers," Scott said.

"We wean according to the season and cow body condition which has improved our pregnancy rates and we've implemented a Pestivirus vaccination program."

The couple are now more conscious of the value of genetic improvement and aim to buy several new bulls each year.

"We focus on growth (particularly 600-day weight) and fertility traits and when we attend bull sales, we shop for particular bulls - it's not about buying a bargain," Scott said.

"Genetic improvement in a herd happens quickly, it's a good business investment."

Snapshot

Scott and Regina Michell, Narrabri, NSW.



Property:
3,335ha

Enterprise:
Beef and wool production

Livestock:
450 Angus cows;
2,500 Merino wethers

Pasture:
70% improved pastures (paspalum, phalaris, panic, bluegrass, clover and subclover);
30% native pastures

Soil:
Basalt-derived soils including red soils on slopes, grading to clays in alluvial areas and shallow soils on ridges

Rainfall:
950mm



Scott and Regina Michell
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To find a MBfP coordinator in your state or learn more about MBfP modules available free online visit www.mla.com.au/mbfp

For the cost of production calculator visit www.mla.com.au/tools

Climate variability

Managing more changes, more often



Table 1 Benchmark data for the five years 2008-2012 for the Darkan area, in the high rainfall region of WA

(A mated/pregnant ewe is 1.5 DSE, hoggets (1yo dry) 1 DSE, wethers 1 DSE, rams 1.5 DSE)

	Group average	Top 25%
Total DSE	12,341	13,064
Ewes	62%	64%
Wethers	2%	2%
Hoggets	29%	28%
Lambing %	84%	91%
Lambs-ewes/ha	5.8	6.7
Wool kg/DSE	3.5	3.6
Losses (%)	8.0%	7.8%
Net wool price	\$6.29	\$6.31
Sale price average (\$/hd)	\$61	\$67
Gross margin/DSE		
Income		
Wool proceeds	\$21.47	\$22.64
Profit from livestock trading	\$20.02	\$25.73
Total sheep income	\$41.49	\$48.36
Expenses		
Sheep costs	\$8.28	\$7.88
Fertiliser	\$2.95	\$3.21
Feed	\$5.59	\$4.93
Pasture	\$0.01	\$0.00
Total variable costs	\$16.85	\$16.02
Gross margin/DSE	\$24.65	\$32.34
Stocking rate DSE/wgha	10.4	11.1
Gross margin/wgha	\$256	\$359

Source: ICON Ag, Darkan WA

Producers have long dealt with variable seasons, but greater seasonal variability is predicted in the future. A new project, **More Lambs More Often**, supported by funding from the Australian Government, aims to give sheep producers extra skills to cope with this change.

With a tagline of 'Bullet proofing your business against variable seasons', the More Lambs More Often program has trained more than 100 farm advisers who will work with producers for the next three years. The project is managed by Rural Industry Skill Training (RIST).

The farm adviser workshops, held across Australia during May and June 2014, were run in conjunction with MLA's Farm 300 program. Both projects shared the goal of reducing greenhouse gas (GHG) emissions from livestock and informing producers about current and future opportunities to reduce GHG emissions from their livestock enterprises.

More Lambs More Often Project Manager Dr Andrew Thompson said seasonal variation was a normal feature of livestock production and presented risks as well as opportunity.

"Within the industry, there are some producers who consistently achieve higher levels of profitability than the average," he said.

"We looked at these high-achieving producers to see what they did differently. How is it that they are better able to cope with seasonal variability? By understanding this, we have been able to put together information that will enable other producers to cope with increasingly variable seasons."

Attributes of the top 25%

Ashley Herbert, from Agrarian Management in Western Australia, who contributed to

the research, said the main distinguishing feature of producers in the top 25% was a significantly higher livestock trading profit (Table 1).

"This accounts for 78% of the difference in gross margin/DSE between the top 25% and the group average," he said.

"The top 25% run a higher stocking rate and produce and sell more sheep/ha for a higher price with a slightly lower cost base.

"Given they achieve a higher level of profit over time, the inference is that they manage to operate more successfully within the normal seasonal variability.

"Clearly, these producers were consistently making better decisions and fewer mistakes within the reproduction and selling activities of the enterprise.

"The higher sale value is most likely linked to timing and stock condition rather than the class of stock being sold, for example prime lambs. The top producers understand the value of livestock at various times of the year and sell stock accordingly."

Flexible systems

According to Ashley, managing variation was all about flexibility and day-to-day adaptability.

"Rigid systems are inherently difficult to manage in variable conditions as there is little opportunity to make changes," he said.

"A common example is a ewe-dominant flock lambing in May. Lambing invariably begins before the season has begun and there is little that can be done until lambing is complete.

"The usual approach with this system is to run a low stocking rate to ensure all sheep are in very good condition and to feed high rates of supplements." →

An action plan

Successfully managing seasonal variation requires a process of:

- Constantly looking weeks and months ahead and - to some extent - to the next season
- Having a strategic and tactical plan to manage seasonal variation
- Working to the plan with discipline - making decisions and following through with timely action
- Reviewing and revising the plan as necessary
- Understanding available strategic and tactical options in terms of how they work and when and where they are applicable.

Table 2 Example of a management strategy for dry periods

Date	Potential stocking rate (DSE/wgha)	Planned stocking rate (DSE/wgha)	Tactic	Change in stocking rate or carrying capacity	Actions
1 May	11	8			
7 May	10	8			
14 May	9	8			Scan ewes - 227 dry ewes
21 May	8	8			
28 May	7	8	Increase grain feeding by 100g lupins/day	-500 DSE CP	Buy 50 tonnes lupins
4 June	6	7	Sell dry ewes Increase feed another 50g lupins/day	-500 DSE SR	Sell 227 ewes
11 June	5	5	Sell top line wether hoggets feedlot remainder	-844 DSE SR	Sell 281hd Buy 50 tonnes lupins and 50 tonnes hay
18 June	4	5	Increase feed another 50g lupins/day		Buy 50 tonnes lupins

Source: *The Sheep's Back*

→ An alternative approach would be to change lambing time or to run a different flock structure. Later lambing gives more time to manage grazing, and dry sheep provide more opportunity for grazing management, early sales and are less sensitive to management.

Timely action

Andrew said an exit strategy - which defines the actions to be taken with given seasonal conditions at pre-determined dates - was not something to be determined when things were already looking bad.

According to Andrew, the key to successfully managing a poor season is early recognition and timely action. This ensures that the most options are available and gives the producer the best chance of remaining in control. Waiting reduces the number of options and takes control away from the producer. A clear exit strategy is an essential component for successfully managing poor seasons (Table 2).

"Coping with variability means you always know what you will do if the season doesn't pan out as you hope," Andrew said.

"It's wise to develop an exit strategy for a poor season when things look good - when emotion and stress levels are more manageable and you can think with a clear head."



Dr Andrew Thompson

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The Walshes (see story on page 25) have successfully used saltbush to provide feed over the summer-autumn feed gap.



Snapshot

Ian and Joan Walsh, Michael and Mindy Walsh, Cranbrook, WA.



Property:
1,600ha

Enterprise:
Self-replacing Merinos, cropping (canola, barley and oats)

Livestock:
1,200 ewes and followers

Pasture:
Native, semi-improved and improved grasslands with a tropical legume

Soil:
Sandy duplex

Rainfall:
400-425 mm

Ian Walsh has seen a lot of seasonal variability on his family's Cranbrook farm in the past five decades and has developed strategies to mitigate risk.

Ian's exit strategy

1. Keep a close eye on the prevailing condition of the pastures to avoid wind erosion and condition of the livestock.
2. Make decisions early. Even as early as February/March, during the budget planning period, think about what to do if the season is late.
3. Sell dry ewes in early May.
4. Apply nitrogen to perennials after rain.
5. Depasture sheep on perennial pastures and the coming season's cropping paddocks to defer graze lambing paddocks. Nitrogen may also be applied to these paddocks.
6. Send wether hoggets to agistment mid-May or sell them if the price is right.
7. Send ewe hoggets to agistment late May/early June.
8. If agistment is unavailable, the hoggets are confinement fed on a ration of lupins/oats/straw.
9. Some lambing ewes could be sent on agistment early to mid-May if things are looking very bad.
10. Purchase extra lupins.
11. Drop some paddocks off the cropping program.

Farming with flexibility

Since 1959, Ian Walsh has never seen a season play out on his Western Australian property the same as the year before.

The Walshes run a self-replacing Merino ewe flock and aim for 10 DSE/ha.

"Variability doesn't translate to bad seasons," Ian said.

"Sometimes, our drier years are our better years. It just means that we have to be flexible in our farming system and in our management decisions.

"For example, we shear in April so that if we have to sell sheep because of a late break the wool is already harvested. Lambing is in July/August to give us the option to move ewes off the property pre-lambing if the season is looking particularly bad."

Generally, the seasonal break comes around mid-May.

"Because we run the property much more intensively than we did, say, 30 years ago, even with an average break to the season,

things can go downhill much more rapidly than in earlier times. We need to keep a close eye on the season as it unfolds," he said.

Ewes are scanned early May and twin carriers are run in their own mob, even in a good year. Dry ewes are sold as soon after scanning as possible.

"If the seasonal rainfall outlook is for a dry winter, we begin looking for agistment and will send last year's lambs away if the season has not broken by mid-May," Ian said.

"Wether hoggets are sent away first and, if the rain has not come by late May, we send away the ewe hoggets. We only send ewe hoggets away as a last resort, due to biosecurity hazards such as foot rot, OJD or lice being brought back to the property when they return.

"If possible, the wether hoggets are sold for export direct from the agistment property.

"We buy lupins each year for supplementary feeding, and retain some oats at harvest. We feed 50:50 oats/lupins to the young sheep to assist with gut fill. Sometimes we bale barley header rows for roughage and gut fill."

Ian said this program was implemented in some shape or form most years.

"For example, we sold the wether hoggets in May this year due to the good price, instead of the usual time of September/October," he said.

"We did this because the ewe scanning suggested that we had a lambing potential of 146% and so we would need more room for those lambs in September/October. You need to be flexible."



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Reproductive performance 101



Geoff Niethe (pictured), veterinarian, consultant and MLA's Animal Production Research Coordinator, shared his top tips on how to improve reproductive performance in northern beef herds.

What's the best way to improve a herd's pregnancy rate?

There are a lot of reasons why females don't conceive. However, the most influential factor is body condition score at calving. Cows should be score three or better to ensure they cycle again six to eight weeks after calving.

Why the emphasis on the performance of young breeders?

Irrespective of where you operate in Australia, the biggest challenge is to get good conception rates in heifers on their first joining. These breeders are trying to lactate and raise a calf while cutting teeth and growing. The more you look after them and lift their productivity, the more you will improve your herd's performance.

What might cause lower than expected weaning rates?

Lots of things but the most important step is to pregnancy test (with foetal ageing) to determine when losses occur. After determining 'when', you can focus on 'why'. If you don't pregnancy test, then you don't know if the problem is a failure to conceive, early abortion or losses after pregnancy diagnosis:

- Losses after pregnancy diagnosis can be due to abortion and, if this is the case, these dry cows (not lactating) will usually be in better condition than those that lost a calf after calving. Collect blood samples to test for Leptospirosis, Pestivirus, Vibrio and Neospora etc.
- If the losses occur after calving (most losses normally occur within the first few days) then try stripping some milk (take care) from the teats. Cows that have started to milk will usually still have thin watery secretions. The more it looks like milk, the more recent the loss.

→ If foetal ageing was done and individual records kept, then work backwards to determine when the losses may have occurred.

Floods, heatwaves, out-of-season calving, mustering events or cold, wet snaps may have coincided with losses. Dog bites and injuries will indicate that wild dogs were an issue.

→ If the losses occurred after branding, then a simple count of calves and check of castration and dehorning details may point to problems with husbandry techniques and a lack of 5-in-1 vaccinations

Why foetal age?

Foetal ageing doesn't just determine if a female is pregnant, it also determines how long for. Enterprises that can't implement short joining periods because of seasonal variation, or lack of bull control, can lift both their productivity and profitability by segregating their breeders according to when they will calve. It reduces supplementation costs, mustering costs and calf losses as no breeders are mustered around calving time. It is a great tool to put selection pressure for fertility on maiden heifers and it provides additional valuable information as to the causes of poor reproductive performance.

When is the best time to calve?

It depends on property location and the target market for weaners. For the best reproductive results, calving should occur six to eight weeks before the 'green date'. The 'green date' in summer rainfall regions is generally defined as the number of days after 1 October to achieve a 70% chance of receiving 50mm or rain over a week. If your 'green date' is 31 December, then your first calves should drop in the first week of November. Ideally, mating should start three months

Calendar for beef breeding herds in predominantly summer rainfall regions

	January	February	March	April	May	June
Bulls	Bulls in if controlled mating	Monitor periodically for illness, injury or absenteeism			Bulls out if controlled mating	
Breeders					Pregnancy test and foetal age females. Cull animals less than two months pregnant or empty if there are surplus pregnant breeders Cull on age and performance Vaccinate remaining breeders as required	
Heifers	Maiden heifers to be at critical mating weight (Brahmans about 345kg)					Lighter replacement heifers – feed protein meal or give access to better grazing to meet joining rates (about 345kg)
Yearlings				Blood test just after wet season to determine if herd needs P during next wet season		
Weaners				Purchase hay/pellets for weaning	Weaning	
				First round of weaning starts (if continuous joining) Vaccinate weaners where applicable eg 5/1		
Other			Stocktake/pasture assessment – determine carrying capacity for rest of year Plan sale dates for male cattle according to market specifications			

later, ie, 1 February. However, maximum reproductive performance does not always equate to maximum profitability. Many producers opt for earlier joining dates to synchronise with their target markets.

When are heifers ready to join?

Heifers need to have reached their critical mating weight (weight at which 84% of them will conceive in six weeks). Unfortunately, it varies between and within breeds and has not been determined for Brahmans in northern Australia. However, it will be higher than the 334kg average weight at puberty (calculated from Beef CRC data). Age and weight at puberty is highly heritable and rapid genetic improvement can be made in this area. If reproductive performance is an issue, over-mate your heifers and select those (with consideration of temperament) that became pregnant in the first two cycles of joining. The results may surprise you as some of the younger smaller heifers may be in the chosen replacements.

Why is identifying early conceivers important?

Heifers that conceive at the 'right' time first up have the best chance of getting back in calf the following year. If you simply put no pressure on your heifers and join for four months without foetal ageing, then on the surface a pregnancy rate of 90% may appear to be a good result. But what chance do those heifers have of getting back in calf if they only conceived at the end of the joining period? Animals that conceive early are valuable because the age of puberty is highly heritable and is linked to lifetime reproductive performance. If you are breeding your own bulls, and fertility is of the utmost importance, then you only want to keep potential sires out of cows that re-conceived early and have produced a calf every year.

What can be done to ensure heifers are ready to join at the start of the wet season?

Plan ahead. Just don't put them back in the paddock and forget about them - they are future performers in your team. If you're in an acutely phosphorous deficient region, give P supplementation during the wet season the year before as this will lift growth rates by 40-60kg. Growth rates can also be boosted by reducing stocking rates and/or supplementing with protein meal prior to joining.

Is there any advantage to mating heifers earlier than the main herd?


Rather than mating them with the main herd, you could put the bulls with them a month earlier. This group is under the most nutritional stress because they are still growing and this practice gives them more of a chance to get back in calf the following year. However, it also means that you have to achieve your target weights an extra month earlier than the green date and this may not be feasible or cost effective in many environments.


How do you decide if yearling mating is an option?

While yearling mating is usually the single biggest management practice a producer can use to lift profitability, it is not an option for everyone. Firstly, your country needs to be able to achieve growth rates of more than 150kg/year regularly and weaning weights of more than 240kg, otherwise the feed inputs are too expensive and the re-conception rates are often low if supplementary feed is not continued. The risk of dystocia (calving difficulties) is also increased the younger the heifer is.

How can management or selection of bulls improve a herd's performance?

Bulls have the biggest genetic impact on a herd and it's through bull selection you can fast track your herd's genetic improvement. To improve herd fertility, buy bulls with above breed average Estimated Breeding Values for reproduction (days-to-calving and scrotal circumference) and make sure they come with a Bull Breeding Soundness Examination Certificate (BBSE). Before putting bulls out, conduct a BBSE.

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 Find more information on reproductive efficiency at:
www.futurebeef.com.au

Weaner management in northern beef herds
www.mla.com.au/weanermanual

Heifer management in northern beef herds
www.mla.com.au/heifermanual

July	August	September	October	November	December
		Do BBSEs on herd bulls and booster vaccines; assess bull numbers and purchase replacements using BREEDPLAN data			Give initial Vibrio shot (if required)
	Monitor body condition of breeders - non-protein nitrogen supplements if BCS 2.5 or less			Calving starts - need to be in BC 3 or better at calving	
	Spike feed pregnant replacement maiden heifers in last trimester to boost re-conception				Green date (will vary with location). Heifers should weigh 320kg
Monitor faecal egg counts	Second round of weaning starts (if continuous joining)				
			Start feeding P (if required)		

Market compliance

The rise and rise of MSA sheepmeat



2008

MSA sheepmeat program begins

34,075

lambs processed under MSA pathway

2013-14

6.6 million lambs processed under MSA pathway

2.78 million lambs trademarked as MSA-graded

18 processors licensed to process MSA-graded lamb

18,858 registered MSA lamb and sheepmeat producers

In just six years the number of lambs processed under an MSA pathway has grown by more than six million.

MSA Operations Manager Terry Farrell said the uptake of the MSA program by processors and producers was expected to maintain its momentum.

"Feedback from industry has been positive and I think it's simply because the program makes good sense."

"From a producer standpoint, it's just good practice, and for a processor it means having a quality mark on their brand showing the product has met best practice at every stage in the supply chain."

The MSA sheepmeat program is moving to the next stage in the program's evolution.

"The majority of Australian major supermarkets include MSA-graded product, and there are some real opportunities for MSA sheepmeat in export markets", Terry said.

"We already have approval from the US Department of Agriculture (USDA) for MSA-graded lamb to be identified in the US market as being from a USDA Process Verified program - MSA - that provides consistent eating quality."

"We're also developing grading technologies to measure meat quality. This will allow us to implement an enhanced cuts-based model to determine the eating quality of different muscles in the carcass across various cooking methods."

"This technology will help address the problem of not enough accurate and

meaningful information going back to producers to allow them to analyse the eating quality of their livestock. It will help producers make informed decisions for their on-farm management and will bring them closer to the consumer, which is a good thing in a food supply chain."

There is no MSA Index for sheepmeat at the moment (see story in the June 2014 issue of *Feedback*), but Terry said an index would have definite benefits for producers and he anticipated its development in the next couple of years.



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MSA helps hook markets



Prime lamb producer Tony Hines (pictured with his wife Janelle) became MSA accredited in 2012 to ensure continued access to a variety of over-the-hooks markets.

Snapshot

Tony and Janelle Hines, Lyndhurst, NSW.



Property:
385ha

Enterprise:
Prime lambs

Livestock:
1,500 first-cross ewes

Pasture:
Phalaris, cocksfoot and sub-clover

Soil:
Yellow podzolic soils - from grey to heavy black clay

Rainfall:
800mm



Key requirements for filling out the National Vendor Declaration (NVD) for MSA sheep

MSA sheep producers need to ensure the following is completed on their NVD:

- MSA registration number included in 'Additional Information'
- property Identification Code (PIC) that holds the MSA registration
- month of shearing
- time off feed
- time of dispatch

To become an MSA-registered producer or to read more about MSA sheepmeat and producer requirements, visit www.mla.com.au/msa

A former cattle producer, Tony switched to lambs in 1985 and began selling over-the-hooks to Bush's Fresh Meats in the early 2000s.

Tony runs 1,500 first cross ewes on 'Balambah', near Lyndhurst in central west New South Wales. "We now sell to Woolworths, Coles, JBS Australia and Bush's over-the-hooks," Tony said.

"We're not getting a premium for being MSA accredited, but MSA provides access to those over-the-hooks markets which do provide a premium over saleyard prices.

"Selling over-the-hooks also provides security because we know what we're going to get, which is the most important thing for us.

"If you've got your weights and yields right, you know the money is there before they leave the property, whereas in the auction system, who knows? Prices can vary by \$30 a head from one week to the next in the same saleyards - we've seen that happen a couple of times this year."

Tony has been using White Suffolk rams over his ewes for at least 15 years, but is in the process of moving to Dorset rams, to open up more market opportunities.

"For those that don't fit the buyers' grids, demand is better in the saleyards for Dorsets," he said.

The sheep are run on improved pastures of phalaris, cocksfoot and sub-clover, which Tony began sowing down in the early 1980s.

"We grow about 40ha of oats a year in paddocks that haven't been sown down yet, and if we run a

bit thin we direct drill oats for some carry-over feed and for grain feeding if needed," he said.

"For the past two years we've fed all our lambs in autumn, but we usually don't have to."

About four years ago, he moved lambing forward to avoid prolonged cold weather and now lambs from mid-May to the end of June.

Tony said he learned from experience how to manage his sheep to ensure the majority stay within the buyers' grids.

"At one stage we were aiming to produce a 20-24kg, fat score 3 lamb for Bush's. We could turn off the weights quite easily, but were tending to turn off fat score 4 or more, so we had to learn to grow a bit leaner lamb," he said.

"That's when we introduced White Suffolk rams, plus we weaned a bit earlier and backed off on the feeding, rather than pushing them through onto the best paddocks all the time."

Tony registered for MSA by completing the online application. He said the MSA requirements based on best practice already matched his management practices, because he had already changed to meet over-the-hooks standards.

"The only difference now is we put the four-digit number on our National Vendor Declaration in Part A where it asks for additional information to say 'yes, I am MSA registered,'" he said.



Tony Hines // T: 02 6367 5072

Read about Bush's Meats and MSA →

Market compliance

Premium position



MSA-graded carcasses destined for Bush's Fresh Meats' Crystal Spring brand.

NSW retail meat chain Bush's Fresh Meats is a vocal advocate for Meat Standards Australia (MSA).

The company was the first NSW retailer to adopt MSA beef standards when introduced 15 years ago and actively campaigned for a similar lamb program, becoming the first NSW retailer of MSA-graded lamb as well.

Bush's Fresh Meats business development manager Paul Fahey said the retailer used MSA to underpin its own beef and lamb brands, and had created a point of difference and built customer loyalty through consistently high quality product.

"We adopted MSA beef standards 15 years ago and then added some of our own specifications, including hormone-free product, to create our Riverina Blue premium beef brand," Paul said.

"The Riverina Blue brand is still growing and the market knowledge of it is second to none. Our customers come into all of our 24 stores asking for it by name.

"When MSA-graded lamb was developed, we again created our own brand based on MSA specifications, which we called Crystal Spring.

"In suburbs like Bondi Junction and Gordon - the upper echelons of Sydney - we get a really good price for MSA-graded product, but even when we move out west to Campbelltown and Merrylands we can still be \$10 a kilogram dearer than our opposition who are not selling MSA-graded.

"On our non-branded products we need to be within \$1 or \$2 of our competitors to sell the turnover we need."

Brand power

Paul said creating its own brands had been an important factor in Bush's success, particularly given the supermarket pressure of the past two years.

"Our stores are all situated outside a major supermarket and the supermarkets are competing hard on prices, plus they've started selling MSA-graded product and their advertising budget is much bigger than ours," Paul said.

"We've taken advantage of their MSA advertising by displaying the MSA logo more clearly in our stores, but we've also used our own brands to create a point of difference that allows us to get a better price than straight MSA.

"For example, when customers come in and say 'oh, do you sell MSA like the supermarket?' we can say, 'yes, but we've sold it for 15 years and we have our own Riverina Blue brand with its own strict guidelines'."

According to Paul, the biggest benefit of the MSA program is the supply of consistent product.

Bush's Fresh Meats contracts Central West NSW livestock agent JJ Dresser and Co to

Lamb purchasing trends - what's hot?

Life has changed, and not many people go to mum's for a lamb roast anymore, according to Bush's Retail Meats business development manager Paul Fahey.

Paul said retail butchers have found customers steer away from traditional large legs of lamb in favour of smaller, mid-week style roasts.

"We're finding a butterflied, marinated leg of lamb is a lot more popular than a traditional leg, especially in summer," Paul said.

"Instead of having a hot leg of lamb cooking in the kitchen, people can quickly cook it on the barbecue.

"We do a couple of different marinades and the customers love the flavours, and they present well with fresh herbs in the window, which adds fresh appeal to your display.

"Curries and slow cooking are more popular in winter, so we do diced lamb and lamb strips for stir fries, and again we find a small roast - suitable for two or three people during the week - is more popular than a large roast."



source lambs from MSA producers in the Cowra-Junee area.

"Even with the change of seasons in NSW, which can be fairly extreme, the quality of our lamb doesn't change," Paul said.

"Our display always looks top-notch, because the MSA-graded meat presents so well and our customers have confidence in the product because it's consistent and is presented with the MSA-recommended cooking methods."



Paul Fahey
E: pfahey@ajbush.com.au



www.ajbush.com.au

Beef for bistronomy

As National Food Manager at the Spirit Hotels Group, Gary Johnson oversees meals worth \$75 million each year, sold in 91 hotels across Australia. He believes the Meat Standards Australia (MSA) grading system helps him deliver quality to the business.



Spirit Hotels started rolling out MSA-graded beef in August 2014 and, within three months, MSA steaks were on the menu in 30 venues. In September 2014 alone, 4,500kg of MSA-graded beef was sold in the form of 12,000 steaks.

"The secret to any good meal is good ingredients, which is why I chose beef brands backed by the MSA grading system," Gary said.

"It's a trusted symbol, synonymous with guaranteed tenderness, consistency and flavour. Adopting MSA helps take our food offer to the next level."

A chef by trade, Gary worked with international hotel chains such as Hilton and Four Seasons before joining Spirit Hotels - a division of the Coles retail group - in 2011. The group includes hotels from Palm Cove in Far North Queensland to Perth in Western Australia.

He said Australia was a culinary destination thanks to the availability of quality produce, including red meat, but meeting changing consumer demands could be a challenge.

"In the past five years I have seen the dining public become very savvy about what they eat," he said.

"With cooking shows like MasterChef and My Kitchen Rules, diners have learned more about how food is produced and how it should be cooked and, as a result, they are more particular. Our customers demand sophisticated meals at a value-driven price."

This rise of casual fine dining - a trend known as 'bistronomy' - prompted Spirit Hotels to adopt the MSA system in 2014.

Gary said the remaining hotels would be brought on board progressively as chefs and service staff became comfortable with managing MSA cuts.

Chefs are given a paddock-to-plate tour to meet processors and see how carcasses are broken down and graded

to MSA standards, and MSA training to learn about factors such as pH balance, fat colour and marbling. Chefs receive in-house mentoring to build confidence and skills, so the MSA system becomes ingrained in the Spirit Hotels' kitchen culture.

A third of the dishes on the hotels' standard menu feature beef. Diners at hotels serving MSA-graded cuts can order rump, sirloin, grass and grainfed rib fillets and T-bones, plus value-added meals such as the crowd-pleasing MSA rump with lobster.

The MSA logo appears on menus and alongside beef showcased in 'meat windows' at some hotels, as well as the 'steak stabbers' that are placed in the steak to denote cooking style.

Gary is confident in his decision to adopt MSA: "We've seen a significant reduction in the number of steaks coming back to the kitchen and there have been zero complaints about steak quality. MSA has really given our staff and our customers greater confidence in the quality of the beef we serve."

Gary credited MLA with providing the training, information and support to ensure his chefs can confidently serve MSA beef.

"MLA's corporate chef, Sam Burke is in touch with dining trends and provides us with new menu inspiration, while Garry McAlister (Marketing Manager - National Accounts) and Kelly Payne (MSA End User Training Facilitator) have been integral to the set-up, launch and ongoing support for our MSA program," he said.



Gary Johnson
E: gary.johnson@coles.com.au

One-third

of Spirit Hotels now serve MSA beef (at October 2014)

12,000

MSA steaks served in just one month

Pub favourites

are MSA rump, sirloin, rib fillets and T-bones

ChAFTA progress

The first six months of this year will see a flurry of work by Australian and Chinese governments and authorities to bring the China-Australia Free Trade Agreement (ChAFTA) into force in mid to late 2015.

Currently a legal review and translation of the text of the agreement is underway and, once completed, both sides will sign the ChAFTA. The text of the agreement, accompanied by a National Interest Analysis, will be tabled in Australian Parliament for 20 joint sitting days.

The Joint Standing Committee on Treaties will then conduct an inquiry into the agreement and report back to parliament. Legislation can then be introduced to make necessary amendments to any existing legislation, which may affect the roll out of ChAFTA. Relevant regulations will also be amended during this period.

At the same time the Chinese Government will undertake its treaty-making processes and once both countries have satisfied this aspect, diplomatic notes will be exchanged to certify they are ready for the agreement to enter into force.

Generally it is 30 days following this exchange that the agreement comes into operation.

Negotiations on the deal will be monitored by the Australian Red Meat ChAFTA Taskforce comprising all the peak industry councils and MLA.

What will ChAFTA mean for producers?

Sheep

China currently takes 25% of Australia's sheepmeat exports, 90% of sheepskin exports and is also Australia's fourth largest sheepmeat offal customer. Tariffs of between 15-23% currently apply to Australian sheepmeat entering China, 7-14% for sheep and lambskins and 18-20% for sheepmeat offals.

Analysis by the Centre for International Economics (CIE) indicated that the elimination of these tariffs under ChAFTA could result in sheepmeat prices paid to producers increasing by 13-26¢/kg (dressed weight) by 2024 (above baseline levels) - providing total benefits to the sheepmeat sector of \$150 million in that year.

Cattle

In 2013-14, China took 17% of Australia's beef exports, was Australia's largest market for hides and was also a major customer for Australian beef offal. Tariffs of between 12-25% currently apply to Australian beef entering China, 5-9% for hides and 12-25% for beef offal.

Economic modelling by the CIE suggested that cattle prices for producers could increase by 8¢/kg (dressed weight above baseline level) when zero tariffs under ChAFTA are applied in 2024. The annual benefits to the beef sector were projected to be \$270 million/year by 2024 and \$3.3 billion from 2015 to 2030.

And the Chinese?

Chinese businesses involved in the handling, distribution and sale of Australian meat products will also benefit from ChAFTA, as will Chinese consumers and those Chinese businesses further processing Australian hides, skins and meat.



See an update on Free Trade Agreements under negotiation around the world in the March/April edition of *Feedback*.



Follow the progress of ChAFTA at www.dfat.gov.au/fta/chافتا

Recipes

"You'll never lamb alone" over summer with these versatile dishes. Whether for a weeknight meal or entertaining, these recipes show the versatility of lamb. Find more recipe inspiration at

Spiced lamb meatballs with tomato salsa and tzatziki

Serves: 4

Preparation time: 8 minutes

Cooking time: 12 minutes



Ingredients

- 500g lamb mince
- 1 tsp ground cumin
- 1 tsp dried mint
- ½ tsp ground cinnamon
- 1 clove garlic, crushed
- 3 tomatoes, chopped
- 12 mint leaves, finely chopped
- 200g tub tzatziki dip
- 4 flat breads

Method

1. Place the lamb mince, cumin, mint, cinnamon, garlic and a little salt and pepper in a large bowl. Stir to combine and then shape the mixture into 16 meatballs.
2. Add enough oil to a medium-sized, heavy based frypan to come one-third of the way up the side of the pan. Heat the oil over a moderately-high heat.
3. Cook the meatballs in batches, until golden and cooked through. Drain on absorbent paper. Allow the oil to reheat between batches.
4. In a small bowl, combine the tomato and mint leaves. Serve the meatballs with the tomato, tzatziki and flat bread.

Barbecued butterflied lamb leg with parsley, capers and lemon

Serves: 4-6

Preparation time: 8 minutes

Cooking time: 40-50 minutes

Ingredients

1.5kg lamb leg, boned and butterflied
2 tbsp chopped fresh parsley
2 tbsp chopped capers
Grated rind and juice one small lemon
1 tbsp olive oil
Freshly ground pepper and salt
Salad, to serve

Method

1. Preheat the barbecue to 200°C (the burners should be set at medium). Combine the parsley, capers, rind, juice and oil, then rub over the lamb. Then season with pepper and salt.
2. Place the lamb in the centre of the barbecue, skin side up. Turn the burners directly under the lamb off. The remaining burners are left on to conduct and circulate the heat around the lamb.
3. Close the lid and cook for 25 minutes per 500g for a medium result. Test for doneness with tongs in the thickest part. Rare is soft when pressed, medium is springy and well done is very firm.
4. Remove lamb, cover loosely with foil, and rest lamb for 10-15 minutes before slicing. Serve the lamb with salad.



Spiced lamb loin chops with pear and walnut salad

Serves: 4

Preparation time: 25 minutes + marinating/resting

Cooking time: 5 minutes



Ingredients

8 x 100g lamb loin chops
60ml (¼ cup) olive oil
1 tbsp sumac
1 tsp ground cardamom
2 cloves garlic, crushed
Natural yoghurt, to serve

Pear and walnut salad

1 lemon, zested, juiced
1 tbsp honey
60ml (¼ cup) extra virgin olive oil
2 small green pears, halved, cored, thinly sliced
1 bunch watercress
70g (½ cup) roasted walnuts

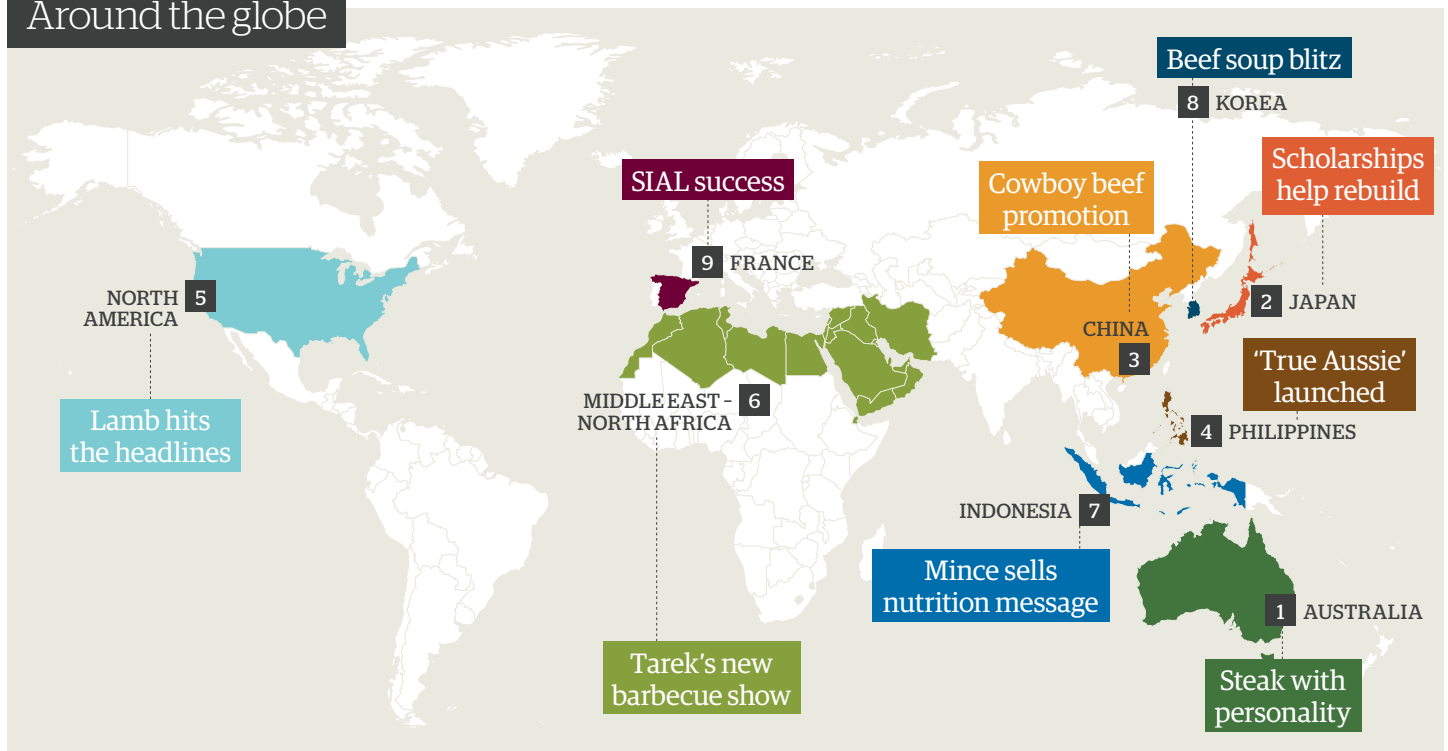
Method

1. To marinate lamb, place oil, spices and garlic in a large bowl and whisk to combine. Add lamb, season to taste and toss well to coat. Marinate for 15 minutes.
2. To make pear and walnut salad, whisk lemon zest and juice with honey and oil in a large bowl. Add remaining ingredients, season to taste and toss well to combine.
3. Preheat a lightly greased barbecue or grill pan to high. Cook lamb loin chops on each side for 1½ minutes or until cooked to your liking. Rest, covered loosely with foil, for five minutes before serving.
4. To serve, divide lamb with pear and walnut salad among four plates. Serve with natural yoghurt on the side.

Hints and tips

- If time permits, marinate lamb for three hours or overnight.
- Use a mixture of your favourite pears and apples and substitute watercress with mesclun leaf or rocket.

Around the globe

**1 AUSTRALIA****What steak are you?**

You can tell a lot about a person by their choice of steak, according to an MLA marketing campaign to herald in the barbecue season. Research has identified seven Aussie steak personalities, or 'steaketypes', which indicate the key characteristics you are likely to have based on your choice of steak. For example, people who choose the rump steak (46% of those surveyed) were dependable and reliable whereas scotch fillet lovers (18%) were independent and meticulous. The campaign, fronted by Anthony Pucharich of Vic's Meats and Victor Churchill, was rolled out to print, electronic and television media in early December. Assess your 'steaketype' at www.facebook.com/nothingbeatsbeef

46%

of consumers surveyed prefer rump steak

2 JAPAN**Rebuilding support continues**

Five students (pictured below) from the devastated Tohoku region, who are currently studying cattle production/beef distribution and are eager to contribute to the revitalisation of the region, will visit Australia this year.

They will stay with Australian beef producing families to gain hands-on knowledge as part of a scholarship through the industry's 'Together With Japan' (TWJ) program. TWJ is an MLA initiative supported by the Cattle Council of Australia, Australian Lot Feeders Association, Australian Meat

Industry Council and Australia's beef producers and processors.

It was launched in 2011 to support Japanese cattle producers affected by the earthquake and tsunami and the scholarship was created with donations from Australian producers, industry associations, exporters and the public.

TWJ is an example of Australia's commitment to Japan to strengthen trade relationships and build understanding between producers from both countries. Information:

www.facebook.com/togetherwithjapan

**3 CHINA****'Ye Ha' for Aussie beef**

'Australian Cowboy' was the theme of an MLA promotion with a major importer to showcase beef master cuts in Shenzhen, in southern China.

Twelve chefs from 11 hotels and 37 chefs and purchasers from 29 restaurants attended. MLA representatives outlined their role in the Chinese market and gave a cutting demonstration using Australian striploin, chuck roll and oyster blade.

Participants enjoyed a dinner of *Shabu Shabu* cooked with Australian Wagyu oyster blade, *Teppanyaki* Wagyu beef chuck roll, roasted Wagyu beef oyster blade and lamb rack steaks.

4 PHILIPPINES**True Aussie launched**

The 'True Aussie' brand was officially revealed in Manila at the country's biggest food and beverage show - World Food Expo (WOFEX). 'True Aussie' branding was used in all of MLA's activities at WOFEX, which

included three culinary competitions involving butchers, chefs and food and beverage representatives, who all worked with Australian beef and lamb. Training was provided by butcher Greg Davis and chef Alan Palmer to 76 contestants prior to the competitions.

76

Filipino chefs and butchers trained with Australian beef and lamb

5 NORTH AMERICA

Making a feature of lamb

MLA's work with important consumer and trade magazines is spreading the word on Australian lamb.

Vanidades magazine - the Spanish language equivalent of *Marie Claire* and one of Latin America's most prominent women's lifestyle and entertainment magazines, with a readership of nearly 520,000 - ran a six page feature showcasing Australian lamb recipes.

Foodservice trade publication, *Flavor & The Menu* magazine also got behind lamb as a key trend for its 25,000 readers (who are influential decision



520,000
readers exposed to six-page lamb showcase

makers in high volume casual dining operations) by naming it the "next big thing" in its September/October edition. An Australian lamb pie was on the cover of its November/December issue.

6 MIDDLE EAST-NORTH AFRICA

Thrills to the grill



Chef Tarek's new Fatafeat TV show 'Mashawy' launched into 55 million households in 21 Arabic-speaking countries across the Middle East, showcasing the 'barbecue experience' using Australian beef and lamb. In the show, Chef Tarek (above) takes his audience on an outdoor barbecue journey in 15 one-hour episodes, which ran from 12 November to 31 December. Recipes include pulled Australian lamb sandwiches and Australian striploin with caramelised onions.

55 million
households reached with Chef Tarek's new show

7 INDONESIA

Mince stars in home cooking

One of Indonesia's well known chefs, Chef Ikhwan (above right), led a hands-on cooking class for 100 housewives at the Hilton Hotel Bandung, demonstrating several cooking and handling techniques using Australian mince.



Participants used beef mince to create three different recipes - beef Aglio Olio (oil and garlic), pancake beef cheese and meatballs.

Nutrition education is vital to informing Indonesian women on the health benefits of beef as an ingredient in their daily family meals. The event was covered in a women's tabloid *Nova*, with a circulation of 650,000, as well as parenting magazine *Nakita* (124,000 circulation).

9 FRANCE

Doing the sell at SIAL

Food professionals from more than 200 countries attended the SIAL trade show in Paris where MLA partnered with seven Australian export companies. There were enquiries from across the globe, with particular interest from Scandinavia.

The new 'True Aussie' global branding was showcased along

The Australian stand at SIAL in Paris.



8 KOREA

A brisket bonanza

One of the popular soup restaurant franchises in Korea, Hanchon Seollongtang, saw a 104% increase year-on-year in overall sales of Korean traditional soups such as Seollongtang - a brisket soup - and a 52% increase year-on-year in Australian beef usage during a one month Australian beef promotion.

MLA partnered with the restaurant to provide 3,000 menu books, 110,000 loyalty cards, 110 posters and 55 banners to stimulate sales of beef through its 'healthy' food menus. The restaurant's usage of Australian beef during the promotion period was around 170 tonnes across its 55 outlets and 380,000 customers visited the restaurants.

52%
increase in Australian beef usage at a Korean soup franchise during promotion

with cooking demonstrations and sampling by 'Kitchen Ambassador' chef Peter Wallace. Beef cuts used were tenderloin, striploin, cube roll and oyster blade, while the lamb showcased was lamb racks, ribs and legs.

150,000
people attend SIAL

Cattle projections

Reduced cattle supplies to spark prices

MLA's market information team has just completed the first series of cattle projections for 2015. To provide producers with more up-to-date information reflecting changes in demand, supply and seasonal conditions, projections will now be released quarterly, instead of the traditional half yearly. Here is the latest outlook for Australia's cattle industry for the coming years.

After experiencing unprecedented turn-off (slaughter and live exports) in 2014 (see figure 1), the Australian cattle industry is likely to see significant adjustments in the coming years, in terms of improved prices and a battle in export and the domestic markets for the reduced supplies.

Slaughter

The five-year eastern states cattle slaughter has averaged 131,000 head/week. As the drought conditions intensified, average weekly slaughter in 2013 increased 8% on the five-year average. Average weekly slaughter increased again in 2014, when the indicative eastern states cattle kill rose by 22% on the five-year average - almost 30,000 head more killed/week (see figure 2).

Regardless of whether there is a widespread break in the drought, the high slaughter in 2013 and 2014 is likely to take a toll on supplies this year, with significant reductions becoming more defined as the year progresses.

Female slaughter accounted for more than 50% of the adult cattle kill in 2014 (see figure 3) for only the third time in the past 40 years, which is likely to slow rebuilding.

The high turn-off has had a dramatic impact on the national herd, estimated to have declined from a 35 year high to a 20-year low in just two years. The flow-on effects from this are likely to last for the duration of the projection period (2020), impacting available supplies, while at the same time, testing market willingness to compete for limited product. This will be most noticeable for northern cattle producers, where there is the option to focus on either livestock export or slaughter markets.

Production

The highest adult cattle slaughter since 1978, combined with significantly heavier carcass weights, saw beef and veal production during 2014 reaching an estimated record 2.57 million tonnes cwt - 10% greater than the previous record of 2013.

While a year-on-year decline in slaughter in 2015 is likely to have a dramatic impact on production - dropping 14% year-on-year to 2.19 million tonnes cwt - production levels are anticipated to be in line with the 10-year average.

The sharp reduction in supplies in 2015 will have a range of consequences, including how the available supplies will be balanced between new and existing customers. This will continue in 2016, when further supply shortages are expected.

Forecasts for 2015

Slaughter	7.8 million head down 15% on 2014
Production	2.19 million tonnes cwt down 14% on 2014
Beef exports	1.05 million tonnes swt down 19% on 2014
Livestock exports	850,000 head down 30% on 2014
Domestic utilisation	640,000 tonnes cwt down 1.1% on 2014

Prices

Export prices in 2014 were at record highs, and are forecast to remain strong in the coming 12 months - given current low US beef production and strong global demand assisted by a lower A\$. This suggests that, while Australian supplies are likely to decline in the coming two years, there will be potential for farm gate prices to lift. This has been exemplified by the recent sudden jump in prices, following widespread rainfall over the Christmas period.

Markets

Given the strength of the US market in particular, and assuming tighter Australian production, an export market realignment is anticipated, with a greater proportion of exports heading towards the US. During 2014, monthly beef exports directed to the US continually crept higher, venturing far outside the average five-year range, with the trend likely to continue again in 2015.

Of the remaining markets, a reduction in export volumes is anticipated, largely as the result of decreased Australian supplies. This trend is likely to be repeated again in 2016 (see figure 4), when further supply reductions are projected.

The domestic market is forecast to remain under pressure, particularly given the ongoing strength from international customers. A key assumption forming the basis of the 2015 cattle industry projections is that parts of Australia will move out of drought in the coming 12 months, with a greater proportion of production and exports to occur in the first half of the year, before easing in the final two quarters.



Facing the camera - Ben Thomas being filmed for the industry projections video.



Watch a short video with Ben Thomas talking about the *Australian cattle industry projections 2015* at www.mla.com.au/industryprojections

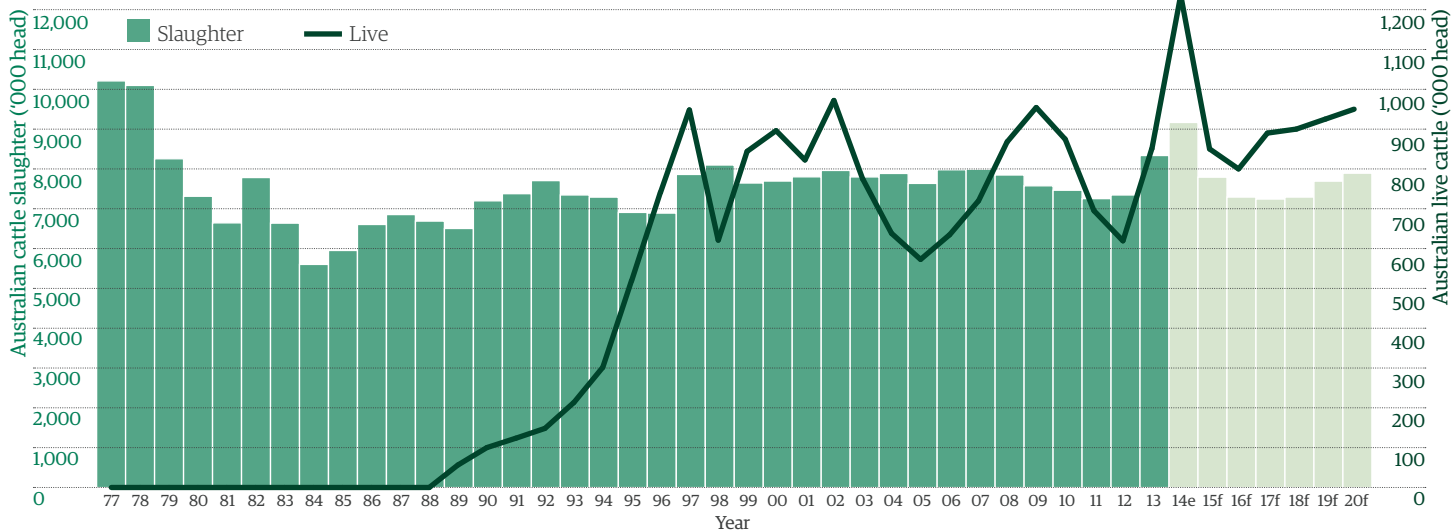


Ben Thomas, MLA Market Information Manager
E: bthomas@mla.com.au



Read the *Australian cattle industry projections 2015* at www.mla.com.au/industryprojections

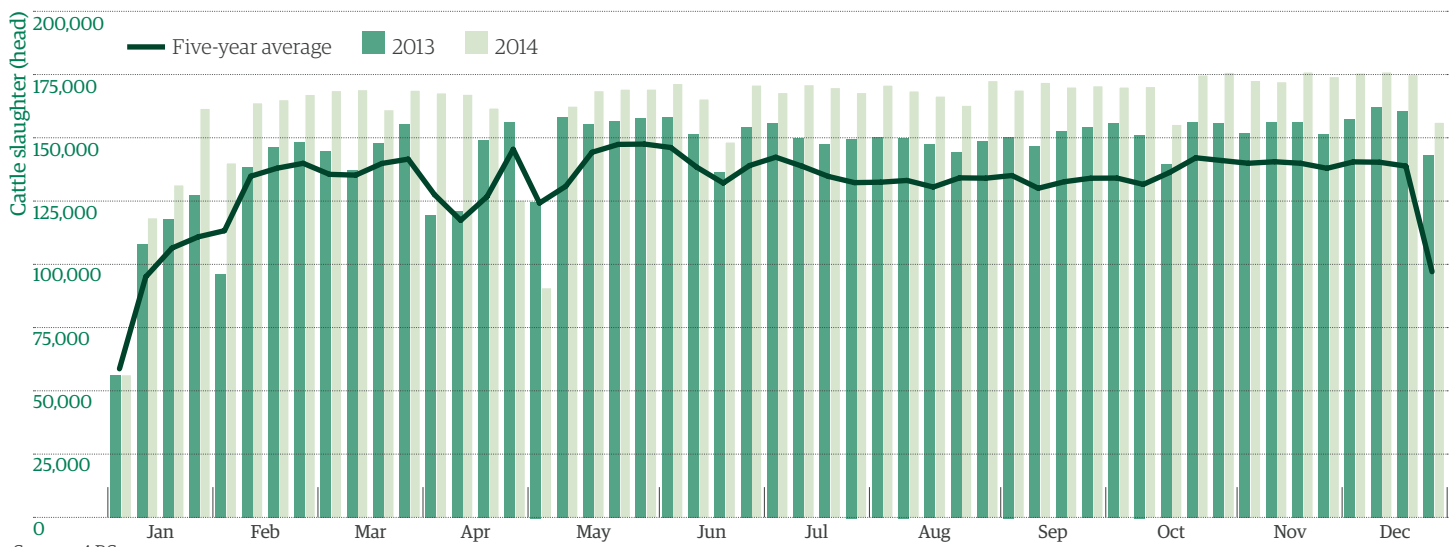
Figure 1 Australian cattle turnoff



Source: Australian Bureau of Statistics (ABS), MLA forecasts

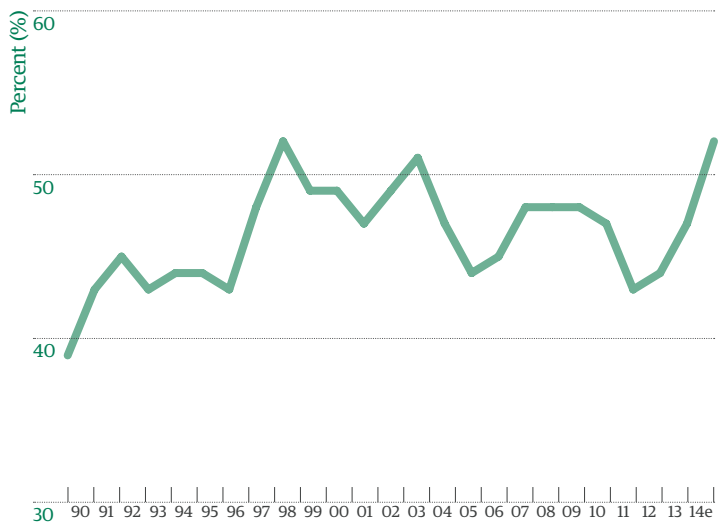
e = expected f = forecast

Figure 2 Eastern states cattle slaughter (head)



Source: ABS

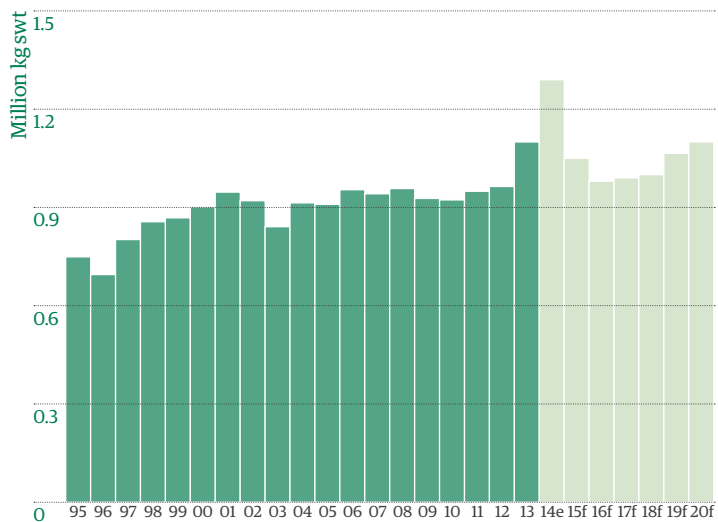
Figure 3 Female slaughter as a percentage of national kill



Source: ABS, MLA forecasts

e = expected

Figure 4 Australian beef exports



Source: Department of Agriculture, MLA forecasts

e = expected f = forecast

The global view// Last year Australia's beef and sheepmeat exports reached record highs, market access barriers were eased and new accounts were secured. And 2015 is shaping up to be another year of momentum as MLA proposes to restructure the seven regional manager roles into six International Business Manager positions, moving away from the management of individual markets and towards an Asian hub.

Here, *Feedback* talks to the regional managers about the achievements in their markets in 2014, as well as their priorities for 2015.



The MLA Regional Managers (left to right): David Pietsch (North America), John Ackerman (Indonesia), Michael Finucan (Korea), Andrew Simpson (South-East Asia/Greater China), Michael Crowley (EU-Russia), David Beatty (Middle East-North Africa) and Andrew Cox (Japan).

North America

David Pietsch // E: dpietsch@mla.com.au

2014: Eight additional beef retail and foodservice customers were secured for Australian beef and six for Australian lamb in 2014, which were directly supported by MLA efforts.

Australia exported almost 20% more lamb to the US, with value increasing by 33% (an additional \$90 million). Market share increased at the expense of New Zealand, which was hampered by lower supplies. Given the higher amount of lamb levies invested in the US, we ran seasonal consumer promotions to stimulate lamb demand - in Miami during spring and winter - delivering more than 15% sales increases in participating retail stores. For the first time data has shown Australia has now caught up to New Zealand in terms of consumer awareness for lamb, and is closing the gap on consumer preference.

The US spent \$1 billion more (115%) to buy 400,000 tonnes of Australian beef in 2014, making it Australia's highest value beef export market. Chilled grassfed beef exports were up 89% year-on-year. Manufacturing made up the bulk (two thirds) of beef exports.

What's next? Marketing continues to target increasing the awareness among retailers and foodservice operators, to make more of the product available to consumers.

Indonesia

John Ackerman // E: jackerman@mla.com.au

2014: We focused on three areas in 2014. The first was on providing support for the Partnership, an initiative borne from the MLA red meat and cattle Indonesia Industry Strategy; second was the delivery of marketing programs that worked with community sectors, chefs and retail to outline the nutritional value and ease of

cooking with meat, underpinned by the attributes of the 'True Aussie' brand; and the third being the continuation of support to the live export industry.

Last year saw record values for the trade, with live cattle reaching close to 700,000 head for the year and boxed beef at over 55,000 tonnes swt to September, the total value of which had already exceeded \$700million (Jan-Sept). Additionally, Australia has seen increased market share year-on-year in the past three years, with Australia now providing over 70% of the boxed beef going into Indonesia.

What's next? Political relationships will need to be strengthened and trade and investment discussions continued as there will no doubt be aspirations by the new Indonesian Government, and Indonesia's newly elected president, to reduce imports of those food commodities produced domestically in Indonesia.

Korea

Michael Finucan // E: mfinucan@mla.com.au

2014: The Korean market performed strongly with export volumes reaching around 150,000 tonnes, making it Australia's third largest trading partner. A milestone was the Korea Australia Free Trade Agreement (KAFTA) coming into force in mid-December. Entry into force by the end of 2014 was critical for the Australian beef industry so it could see both a double tariff reduction (a reduction in 2014 and again in 2015) and the tariff gap with the US reduced.

What's next? This year will provide some challenges - as the economy remains flat and beef is expected to increase in price due to short supply. The 'True Aussie' brand will be rolled out and this new branding position will focus on growing consumer recognition of Australian beef as an ideal protein.

South-East Asia/Greater China

Andrew Simpson //

E: asimpson@mla.com.au

2014: The signing of China-Australia Free Trade Agreement (ChAFTA) in November made it a significant year, as it presents an opportunity worth billions of dollars in the next decade.

Growth of the entire South East Asia region has continued, building on targeted business development through tradeshows, such as Food Hotel Asia Singapore, SIAL Shanghai and World of Food Beijing. Provincial exhibitions have also helped identify niche opportunities, which is supported by ongoing training of MLA's three Taiwanese butchers and market representatives based in Kuala Lumpur, Taipei, Manila, Beijing, Shanghai and Hong Kong.

What's next? As the winter chill sets in across China and Taiwan, so too does the enjoyment of cuisine such as beef stew, lamb hotpot and skewers of charcoal grilled meats. Orders through the year depend on this peak consumption period leading up to Chinese New Year on 17 February. How the market and pricing will respond in March reflects greatly on what product is cleared in the ensuing months. Focus must be maintained this year to ensure free trade agreements with Taiwan are put in place.

EU-Russia

Michael Crowley //

E: mcrowley@mla.com.au

2014: The EU remained the highest value per kilogram market in the world for Australian beef. This market sets the global benchmark for price and provides strong opportunities for supply chains to add value to Australian product from paddock to plate.

What's next? Crucial activities engaging the trade will include chef's tables, training workshops, in-store promotions and partnering with trade to tailor solutions for their customers.

MLA will also host an Australian red meat stand at the ANUGA trade show in Cologne, Germany - the largest in the world. Around 20 Australian exporters will exhibit on the stand.

MLA's priorities around market access, meat safety and issues management will aim to defend existing market access, avoiding loss of access due to meat safety concerns and implement a strategy for longer term improved access.

Middle East-North Africa

David Beatty //

E: dbeatty@mla.com.au

2014: The United Arab Emirates (UAE), in particular, has been Australia's largest export market for lamb in the Middle East for a number of years, and remains a high value trade destination. A large proportion of beef and lamb to the UAE are destined for high-end foodservice and retail, but there is also a growing market for lower value cuts.

What's next? The challenge is to generate innovative and high impact activities which cut through with consumers across the diverse demographic and cultural community.

The focus will be on delivering programs that address this, particularly through retail partnerships and promotions around religious and seasonal events such as Ramadan and winter barbecue campaigns, retail branding programs and sampling activities and by leveraging the popularity and online presence of Middle Eastern media personality and Master Chef Tarek Ibrahim. 'True Aussie' branding will be incorporated into this.

Japan

Andrew Cox //

E: acox@mla.com.au

2014: After a slow start, exports hummed along and it looks like our market value and share will increase for the first time since the staggered re-entry of US beef in 2006. It was also a big year on the marketing front, with the launch of the 'True Aussie' branding, which can now be seen on menus and meat packs around the country.

A highlight was the Australian and Japanese governments agreeing to an 'Economic Partnership Agreement'. Entered into force on 15 January, it has already seen a reduction in tariffs on Australian beef.

What's next? The priority is to embed this new branding and to reorientate the marketing towards communicating our great taste and quality, in the face of stiff competition from US beef and other proteins.

Upcoming events

Bred Well Fed Well

A hands-on workshop about breeding and feeding to make more money. Topics include:

- Improving ewe nutrition
- Developing a breeding goal
- Developing a feed budget
- Breeding better ewes

When, where and bookings:

10 February, Tallangatta Vic
Rina Cooper // M: 0417 535 822
E: office@inspiringexcellence.com.au

When, where and bookings:

12 February, Boorowa NSW
Michael Corkhill //
M: 0428 272 889

When, where and bookings:

17 March, Yass NSW
Mal Peake // M: 0408 426 103

Cost of each event is \$50/person

Nutrition EDGE

The Nutrition EDGE package is tailored for your conditions and enterprise management. It is designed to equip you to make decisions that ultimately help to achieve your herd performance targets through improved breeder fertility, weight gains, optimal use of supplements and overall management.

When and where:

3-5 March 2015,
Longreach Qld

17-19 March 2015,
Halls Creek WA

24-26 March 2015,
Tom Price WA

22-24 April 2015, Derby, WA

Cost varies with location and the number attending from the same business

Bookings and more information:

Désirée Jackson on
M: 0409 062 692 or
E: desireejackson@bigpond.com



Find more events and information at www.mla.com.au/events

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